TECHNICAL SUPPORT FOR
DEFENSE INFORMATION SYSTEMS AGENCY
ENTERPRISE INTEGRATION DIRECTORATE

DELIVERY ORDER FOR GCCS/JOPES DATABASE AND APPLICATIONS PHASE IV

AD HOC QUERY USERS' MANUAL

28 JUNE 1996

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SECTION 1 - SCOPE

1.1 IDENTIFICATION

This Software User's Manual (SUM) provides information necessary for the effective use of the Ad Hoc Query (AHQ) software. This SUM is developed under Contract Number DCA100-94-D-0016. AHQ's use is dependent upon the Client Server (C/S) hardware environment provided by the Global Command and Control System (GCCS) JOPES Database, augmented by the GCCS Status of Resources and Training System (GSORTS) Database.

1.2 SYSTEM OVERVIEW

AHQ operates on hardware provided under the GCCS initiative. To ensure that all users are provided access to the new application, both a graphics-based and a character-based user interface are provided. These interfaces support the variety of hardware configurations currently in use throughout the JOPES community.

1.3 DOCUMENT OVERVIEW

The SUM was designed with the user in mind. Users will maximize their use of the SUM by first thoroughly reviewing Paragraph 3.1, Ad Hoc Query Overview. This section of the SUM provides the user with standard conventions and information about the user interface, screen navigation, functional navigation, help, printed reports, recovery procedures, and security. Conventions and instructions are presented only in these sections but apply throughout the SUM.

This document conforms to the format of DI-MCCR-80019A as contained within DOD-STD-2167A.

- Section 1 contains an introduction and system overview
- Section 2 identifies applicable documents
- Section 3 provides the operational user with sample screens and instructions for using AHQ
- Section 4 provides error messages and their associated meaning
- Section 5 provides a listing of terms, abbreviations, and acronyms used in this document.

1.4 SUM CONVENTIONS

The following terminology and conventions are used in this manual:

- **Required vs Optional Data**. Data entry requirements vary by function usually with a mix of required and optional entries. In addition, the entry of some data may depend on other information also being entered. This is conditional data. The convention used in this manual is as follows:

  - A **required** entry is information that is mandatory. For example, "OPLAN ID" is a mandatory entry when a query is desired from the database. The term "Must" is used in this text for required entries.

  - An **optional** entry is information that is entered at the user's discretion. The term "May" is used in this text for optional entries.

  - A **conditional** entry exists when the text indicates "When..." or "If..." followed by instructions to either: "Must enter" or "May enter".

- **User Interface**. This document is intended to support users of the AHQ Graphical User Interface (GUI) version or users of the Character User Interface (CUI) version of AHQ. Both the GUI and the CUI applications provide identical functionality with the main difference being that the CUI supports users who access the application over lower speed communication lines and who do not use a mouse with their system. The screens in this document are images of the GUI screens. Character-based users should be aware that their CUI screens have similar display and field structure but have more of a text look, similar to the legacy JOPES mainframe screens. Specifically though, scroll bars, slider bars in the GUI version are replaced with pop-up windows in the CUI version. Instructions in this document provide some information on both mouse and keyboard support.

SECTION 2 - REFERENCED DOCUMENTS

The following documents form a part of this manual. In the event of conflict between these documents and the contents of the SUM, the SUM shall be considered a superseding document.

2.1 SPECIFICATIONS

Software Requirements Specification: Scheduling and Movement/Client-Server (S&M/CS), CDRL Item H005. Systems Research and Applications (SRA) Corporation, January 12, 1994.

System/Subsystem Design Document: Scheduling and Movement/Client-Server (S&M/CS), CDRL Item H004. SRA Corporation, April 7, 1993.

JDS Database Specification. TD 18-17; United States Transportation Command (USTRANSCOM) (TCJ6-D), September 30, 1988.

Scheduling and Movement Subsystem Software Requirements Specification (Preliminary Draft). TD 20-61 VOL 1; USTRANSCOM (TCJ6-D), 30 June 1992.

Final Software Requirements Specification for the JOPES CSCI (JISC001) WIS-SPEC-300; 20 December 1991.

JDS System Specification; USTRANSCOM (TCJ6-D). TD 18-50 Vol 1; 22 January 1990.

2.2 OTHER PUBLICATIONS

JDS Users Manual, Volume 2. TD-18-14-1, USTRANSCOM (TCJ6-D).

JOPES User's Manual — Volume 4 (Functional Data Base Management) TD 18-14-1; USTRANSCOM (TCJ6-D).

JOPES User's Manual — Volume 9 Transaction Editor. TD 18-14-1, USTRANSCOM (TCJ6-D).

Characteristics of Transportation Resources Report (CHSTR). JCS Pub 1.03-16 Part 11, Chapter 4. 1 March 1986 (as amended).

Type Unit Characteristics Report (TUCHAREP), JCS Pub 1-03.16 Part 11, Chapter 8. 1 March 1986 (as amended).

Standard Specified Geographic Location Code (GEOFILE), JCS Pub 1-03.19, Part 14, *Chapter 1;* 1 June 1986 (as amended).

Security Policy of the WWMCCS Intercomputer Network, JCS Pub 6-03.7, April 1988.

JOPES Security Requirements, Scientific & Technical Report. SRA Corporation, 28 February 1992.

Software Development Plan, Scheduling and Movement, SRA Corporation. 26 March 1993.

Security Requirements for Automated Information Systems. DoD Directive 5200.28. 21 March 1988.

JOPES Software Configuration Management Plan, SRA Corporation, 21 January 1992.

JOPES Technical Data Base Managers Handbook (Version 3.3). TD 18-64, VOL 4. USTRANSCOM (TCJ6-D), 19 November 1992.

JOPES User's Data Element Dictionary. TD 18-14-2 USTRANSCOM, 26 October 1992.

System Engineering Plan, CDRL Item F00B. SRA Corporation, 18 June 1993.

Implementation Procedure (IP) Document for Automated Information Systems (AIS): Technology Insertion Project (TIP) Site Installation Plan, CDRL Item R003. SRA Corporation, 30 July 1993.

Technology Insertion Project (TIP) End User Manual. CDRL Item H00G/R. SRA Corporation, 6 January 1994.

Scheduling and Movement Database Maintenance Manual. DISA. 2 May 1994.

Getting Started, Applix version 3.0 Software, 1994.

Applix Spreadsheets, Applix version 3.0 Software, 1994.

SECTION 3 - SYSTEM OPERATION

3.1 AD HOC QUERY OVERVIEW

The AHQ software provides a powerful tool for constructing queries and reports. AHQ eliminates the need to know complex query languages, to memorize database schemes, and to know the location of each data element required for a report.

Specific features include:

- **Menu Driven Interface**. AHQ's user interface provides an easy-to-use method for constructing and executing database queries.

- **Flexible Report Formatting**. AHQ allows the user direct connectivity to the Common Operating Environment's (COE's) integrated spreadsheet, graphics, and wordprocessing package, Applix. The user is afforded the opportunity to use this very powerful set of tools, or to save AHQ data to a comma delimited file that may be read by most other commercial software packages.

- **Security**. AHQ automatically protects the stored query specifications. When a specification is saved, AHQ stores the system account name so only that user may overwrite the query specification. When a query is executed, only data that is accessible to the user is returned.

3.1.1 Terms And Definitions

Throughout the remainder of this section, references are made to various aspects of query development and generation. Before beginning, it is important to understand key words and their meanings as they apply to AHQ.

- **Query**. A query is the actual process of accessing the database to retrieve the information requested.

- **Query Specification**. A Query Specification is a compilation of all pieces (i.e., filters, data field identification, limiting parameters, etc.,) of information needed to retrieve selected data and produce formatted output. It is the definition of what is to be retrieved from the database. Query specifications may be saved for repeated use.

- **Qualification Criteria**. The user may specify values to include or exclude, ranges, and criteria with wildcards.

- **Query Results**. Query Results are created as a result of running a query specification. Save query results for review at a later time.

Most often, the term query is used to describe three of the above activities. In the remainder of this section, the term "query" should be taken in the context of the function or activity being described.

3.2 AHQ EXECUTION AND NAVIGATION RULES

AHQ provides users with a flexible tool to construct database queries. Initial execution of AHQ is from the GCCS Desktop, where actuating the icon initiates the AHQ session. The only action necessary to construct a query and develop output is the designation of fields. The actions of a typical AHQ session include identifying data for selection, qualifying the criteria to limit the number of records retrieved, selecting fields for display, and selecting format options for the report. Once a query is defined, select Do It to generate the report.

The AHQ Main Menu (details to follow shortly) consists of the following pull-down options:

- File
- Report.

The remainder of this section provides detailed descriptions of each menu option, sample screen faces, and detailed instructions for executing AHQ. Instructions for using each option are provided in the following general format:

- A description of the purpose of the function, including an example of the screen that is displayed
- Step-by-step instructions for completing the information required by the function, including examples of various pop-up windows that may be displayed
- Summary of steps necessary to complete the function.

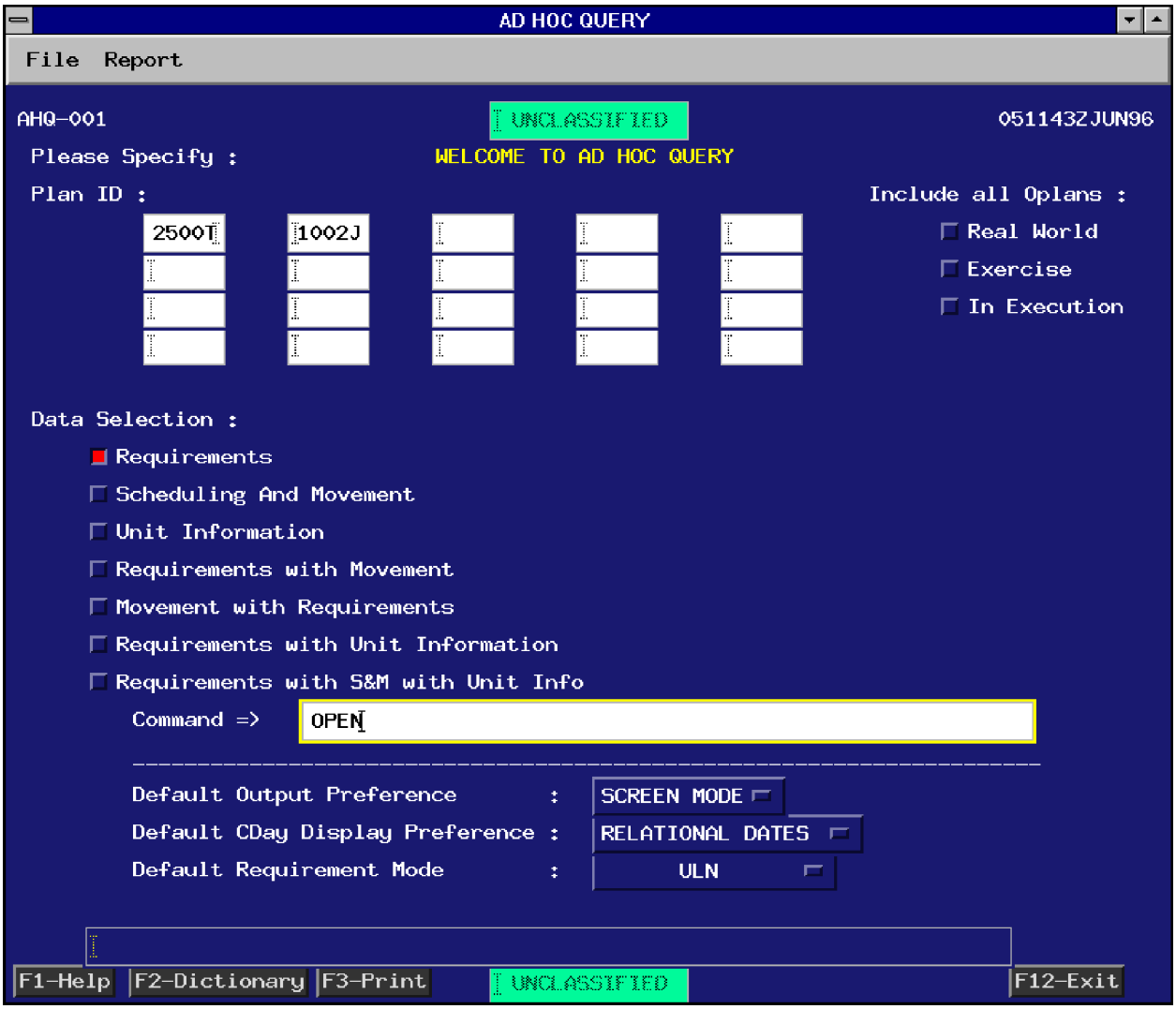


Figure 3-1: Ad Hoc Query Main Menu.

3.2.1 AHQ Main Menu

The opening screen to AHQ provides the capability to focus the retrieval (Figure 3-1). Select a single plan or up to 20 plans in the database to use as a source of information for the retrieval as well as specific groupings of information.

Plan ID. To select a plan or plans (up to 20), enter the Plan Identification Number (PID) in the "Plan ID:" block(s). This PID becomes a qualification from which the retrieval will come, ignoring all plans that are not listed, with the exceptions listed in OPLAN options.

Include all Oplans. The Include all Oplans Option selection allows the user to select, in addition to OPLANs specified in the Plan ID blocks, all Real World, all Exercise, and, or all OPLANs in execution.

Data Selection: Categories. Depending on the data selection category selected on Figure 3-1, Ad Hoc Query Main Menu, a standard set of data elements will be displayed with the data from the designated plan(s). The user must select only one category. Note that the "collection" displays are for the sole purpose of identifying records within the collection upon which further AHQ actions may occur. Once the subset of the database "collection" is defined, the user may select any associated data field in the GCCS JOPES Core Database.

- **Requirements**. Requirements refer to information (Force and Non-Unit records) that exists in the database. When Requirements is selected on the AHQ-001 screen, preset requirement data elements are displayed on the qualification screen

- **Scheduling and Movement**. Scheduling and Movement (S&M) has unique data elements that are associated with S&M activity. When S&M is selected on the AHQ-001 screen, preset S&M data elements are displayed on the qualification screen

- **Unit Information**. There is a specific unique set of information that applies to units, commonly known as Status of Resources and Training System (SORTS) data. It is the type of information that takes a general requirement and identifies it as a specific individual unit. When Unit Information (UI) is selected on the AHQ-001 screen, preset UI data elements are displayed on the qualification screen

- **Requirements with Movement**. This is a combination choice that retrieves the data elements from the two different categories listed. All qualified requirements in the Time-Phased Force Deployment Data (TPFDD) and, with those requirements, any S&M data that is associated. When Requirements with Movement is selected on the AHQ-001 screen, preset data elements are displayed on the qualification screen.

- **Movement with Requirements**. This is an additional combination selection that first looks for S&M data. If there is qualified S&M data, then the system also brings in the requirements associated with that S&M record. When Movement with Requirements is selected on the AHQ-001 screen, preset data elements, with emphasis on Movement data are displayed on the qualification screen

- **Requirements with Unit Info**. This is a combination choice that retrieves the data elements from the two different categories listed. All qualified requirements in the TPFDD and with those requirements, any Unit Information data that is associated. When Requirements with UI is selected on the AHQ-001 screen, preset data elements are displayed on the qualification screen

- **Requirements with S&M and Unit Info**. This is a combination choice that retrieves the data elements from the three different categories listed. All qualified requirements in the TPFDD and with those requirements, any S&M and Unit Information data that is associated. When Requirements, S&M, and Unit Information data. is selected on the AHQ-001 screen, preset data elements are displayed on the qualification screen.

Command Line. The command line is used for rapid navigation commands that move directly to a specific screen or cascade menu by simply typing in the four letter identifier for that function.

Defaults. There are three defaults which may be set by the user. The preset default values are for use of the screen mode, relational dates, and Unit Line Numbers (ULNs).

Default Output Preference. The user has the ability, displayed at Figure 3-2, to run the query to the screen, or if it is a process which would be of some duration, it could be run in the background or in Batch mode. The location of the output is by default initally placed at /h/users/<*UserId*>/Ahq/Ahq_Batchmode_Results_YYMMDD_HHMMSS. The result is a tab delimited file intended to be imported into a spreadsheet or wordprocessor of the users choice.

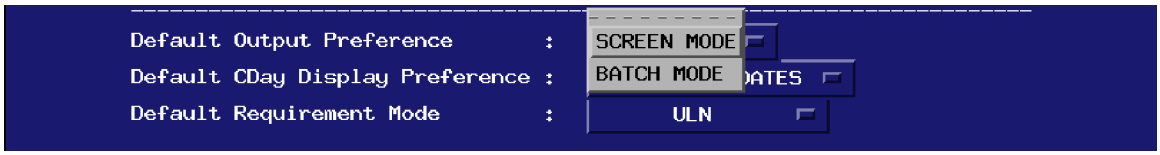


Figure 3-2: Default Output Preference.

Default CDay Display Preference. If Deployment Operation Commencement Day (Cday) has been declared for the OPLANs selected, the user has the option of selecting "real dates" or relational dates. See Figure 3-3.

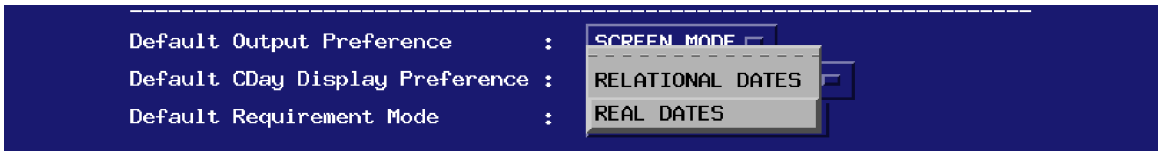


Figure 3-3: Default CDay Display Preference.

Default Requirement Mode. The user is afforded the opportunity of selecting the Requirement Mode to be addressed, either ULN or ULN/CIN/PIN. If the user desires Non-Unit Data retrieved in a query, ULN/CIN/PIN Mode *must be selected*. Performance enhancements may be achieved by narrowing the scope of the query, so ULN has been set as the default value. See Figure 3-4.

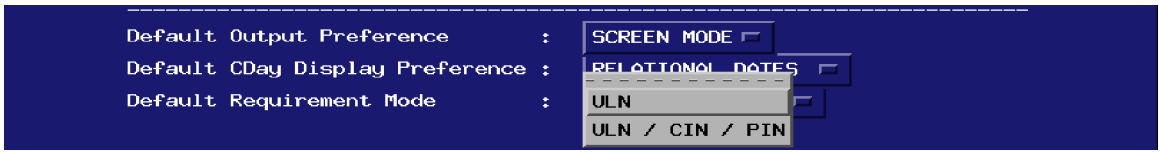


Figure 3-4: Default Requirement Mode.

Message Line. The message line at the bottom of the screen is an information line where the system sends messages about what is happening or warnings when the system/operator has a problem.

Buttons. The bottom of the screen provides four buttons: Help (F1), Dictionary (F2), Print (F3), and Exit (F12).

Menu Bar. The Menu Bar, across the top of the screen, provides the paths to the creation of the retrieval and design of the output. The three pull-down menus are the primary method of enabling use of AHQ.

3.2.2 AHQ Main Menu Execution Summary

1. Select one or a multiple (up to 20) valid PIDs.

2. Select one button adjacent to the Data Selection (collection display) desired.

3. Go to the Report Pull-Down menu and select Qualify. (Alternately use the command line and type QUAL).

3.2.3 File

The File Pull-Down Menu, Figure 3-5, provides users with the ability to perform basic file operations on a query. When FILE is selected from the Main Menu, a cascading menu is presented with the following options: New, Open, Save, Save As, Delete, Export, and Import.

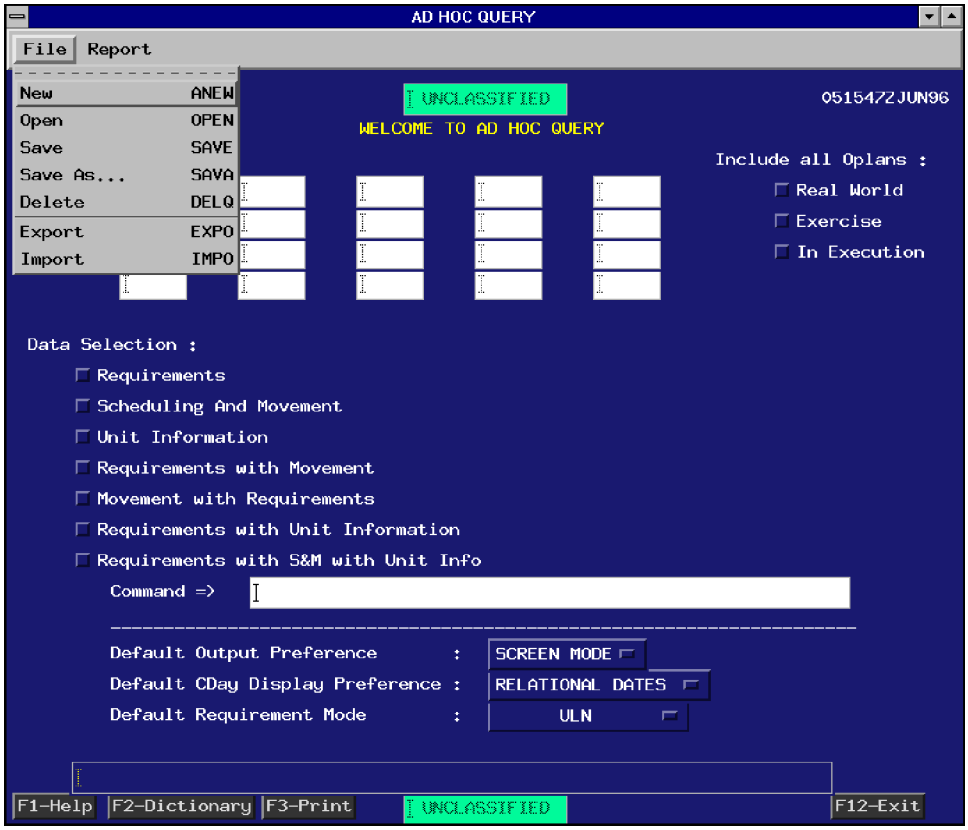


Figure 3-5: File Pull-Down Menu.

3.2.3.1 New. The NEW option clears the system memory of any previously defined or generated queries. When an AHQ session is initiated, no queries are in memory. At session start up, execution of this option results in the Main Menu being displayed and no action taken. When opening the AHQ application, an untitled document is automatically opened. "New" is used when already in the application and desire to open or build a new retrieval. The command line shortcut is ANEW.

When a query has been generated, or a saved query opened and NEW is selected, two possible responses can occur. First, when the query in memory has been retrieved from a file and has not been altered, the query is automatically cleared from memory and the user is returned to the Main Menu. If, however, the query in memory has never been saved or has been modified since the last time saved, a pop-up window will be presented prompting to save the current query in memory.

This pop-up contains the following options:

- YES — Selection of this option presents the Save Query Specification screen. A file name for the query to be saved must be entered and the screen transmitted. When the save is completed, the Main Menu returns.

- NO — Selection of this option clears the current query from system memory without saving it and returns to the Main Menu.

- CANCEL — Selection of this option terminates the NEW function and returns to the Main Menu. The query in memory is neither saved nor cleared from memory.

3.2.3.1.1 New Execution Summary.

To clear queries from memory:

1. Select NEW from the FILE menu.

2. Select appropriate action from Save Query pop-up, if displayed.

3.2.3.2 Open. OPEN provides the capability to open previously saved queries. Selection of this option from the Main Menu displays the Enter Query to Open screen. Specify the file name of the desired query. The command line shortcut is "OPEN". If the name of the desired query is not known, Press F1. The Query selection list screen appears, containing a list of all previously saved queries.

To select one of the queries listed, select the button next to the desired name and click on OK (or press the Enter key). The screen will be redisplayed with the selected name filled in. Click on OK (or press the Enter key) to load the query into memory. Once the query has been loaded into memory, the Main Menu is redisplayed.

If attempting to open a query when one is already in memory, a pop-up confirmation panel will display asking if the requested query should be appended to the query already in memory.

Selecting YES will cause the selected query to overwrite the query in memory. Selecting NO will terminate the open query process and redisplay the screen.

3.2.3.2.1 Open Execution Summary.

To open a query file:

1. Select OPEN from the FILE menu.

2. Enter the name of the query to be opened.

3. Click on OK.

3.2.3.3 Save. The SAVE option allows the user to save queries for future use. If the query in memory has not previously been saved, the Save Query Specification screen is displayed. A name for the query to be saved must be entered and the screen transmitted. When the save is complete, the Main Menu is presented. The SAVE command will save the current retrieval into the file as it is presently named. The command line shortcut is "SAVE".

When the query in memory was retrieved from an existing saved query (see OPEN for instruction on how to retrieve a saved query), the query is automatically saved with the name from which it was retrieved and the Main Menu is presented. If SAVE QUERY is selected with no query in memory, an error message stating "No query is currently open" is displayed and the Main Menu is presented.

3.2.3.3.1 Save Execution Summary.

To save query files:

1. Select SAVE from the FILE menu.

2. Enter name for query to be saved.

3. Click on OK.

3.2.3.4 Save As. SAVE AS provides the capability to save a query using a different name. For example, when opening an existing query and deciding to change one of the qualification values. However, an additional desire may be to retain the query in its original form. The SAVE AS function allows the entry of a different name for the query in memory (as modified). This process ensures that the original query remains intact. Selection of this option presents the "Save Current Query as:" screen. A new name for the query to be saved must be entered and the screen transmitted. When the save is complete, return to the Main Menu. The command line shortcut is SAVA.

In the event that a query specification with the same name as entered in the query name field already exists, a confirmation panel is presented, asking if the current query should overwrite the named query. If selecting to overwrite an existing query, the original contents are replaced with the query in memory. If electing not to overwrite an existing query, the Main Menu is returned.

3.2.3.4.1 Save As Execution Summary.

To save queries under a new or different name:

1. Select SAVE AS from the FILE menu.

2. Enter a new name for query to be saved.

3. Click on OK.

3.2.3.5 Delete. The delete option allows deletion of saved queries no longer required. When this option is selected from the FILE menu, the "Enter Query to be Deleted" Screen is displayed. Delete Query provides a pop-up to enter the name of the file to delete. Note that the F1 key displays queries that the user may delete. The command line shortcut is DELE.

3.2.3.5.1 Delete Execution Summary.

To delete saved query files:

1. Select DELETE from the FILE menu.

2. Identify queries to be deleted in the Query Selection List.

3. Click on OK.

3.2.3.6 Export. The EXPORT option allows the sharing of saved queries with other users. When this option is selected from the FILE menu, the "Enter an Export Query Name:" screen is displayed. Export provides a pop-up to enter the name of the file for export. The F1 key displays files to be exported. The command line shortcut is EXPO.

3.2.3.6.1 Export Execution Summary.

1. Select EXPORT from the FILE menu.

2. Identify queries to be exported.

3. Click on the SELECT button to move files to be exported.

4. Click on OK.

3.2.3.7 Import. The IMPORT option allows use of exported queries from other sources. When this option is selected from the FILE menu, the Import Query Specifications screen is displayed. Import Query provides a pop-up to enter the name of the file for import. The F1 key displays files that may be imported. The command line shortcut is IMPO.

3.2.3.7.1 Import Execution Summary.

1. Select IMPORT from the FILE menu.

2. Identify query to be imported.

3. Click on the SELECT button to move query to be imported.

4. Click on OK.

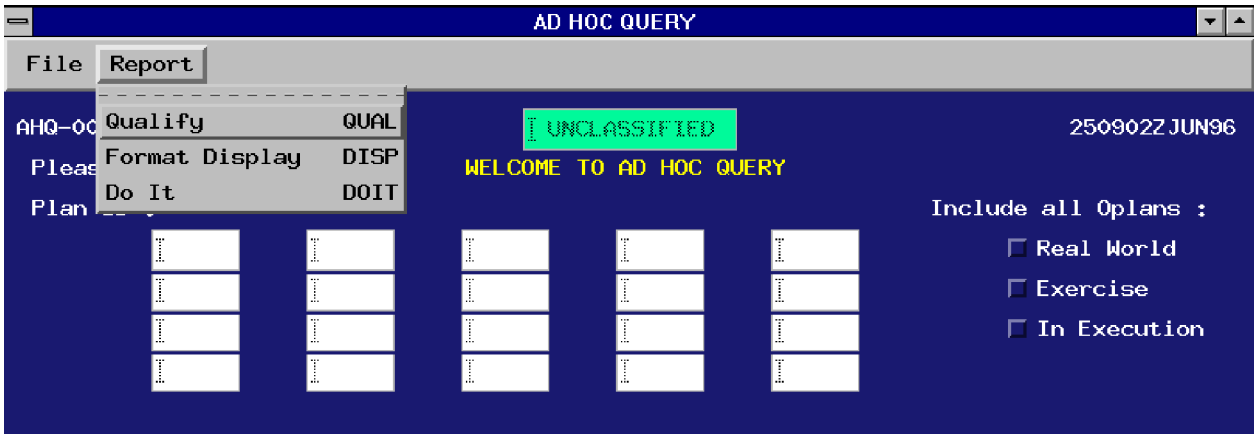


Figure 3-6: Report Pull-Down Menu.

3.2.4 Report Pull-Down Menu

The Report Pull-Down Menu, Figure 3-6, allows the user to perform three functions: qualify a report, format the display of a report, and execute a process with the command Do It.

3.2.4.1 Qualification Process. The Qualify Query allows retrieval of collections of data by specifying combinations of data characteristics in retrieval equations, called qualifications or filters.

The screen provides an assortment of tools for building the query lines that determine which information is shown in the data specification area. Virtually any data element of a movement requirement may be used in a query line. Properly planned retrievals can be used to group and display significant movement requirement factors.

The Qualification option provides the path to further focus retrievals to the specific information needed. Remember, qualification on the OPLAN ID(s) has already occurred on the AHQ-001 screen. This will be the first path to follow because it is the heart of the retrieval program. The command line shortcut command is QUAL.

3.2.4.1.1 Qualification Execution Summary.

1. Select QUALIFY from the REPORT menu and release.

2. Press [RETURN].

Figure 3-7: Qualify Query Screen.

3.2.4.2 Qualify Query Screen. The Qualify Query screen, Figure 3-7, is where qualification begins. It is divided into several parts. Across the top, down the left side, and across the bottom are action/selection keys. They are used to select specific data elements as qualifiers and how they are to be treated in the retrieval process. Data selection criteria are displayed on the right side of the screen. Each line represents a data qualification (e.g. ULN= POFG). Data qualifications which appear in the same box are grouped logically with an "AND" condition. Data qualifications which appear in different boxes are grouped logically with an "OR" condition. An unlimited number of "and" statements in a single section are allowed and 21 "or" statement blocks are available. Begin by selecting the first qualification item desired.

Menu Bar. The Menu Bar packages data elements into logical subgroups, thus avoiding a screen with 300 plus items listed for selection. Access to all the data elements of the TPFDD is available. By selecting one of the Menu Bar picks, a pull-down menu is presented that eventually leads to specific data elements for qualification. The paths are:

Force Module Pull-Down Menu. The shortest of the pull-down menus is the Force Module option. By pointing and clicking on Force Module, Figure 3-8, a pull-down menu activates the data qualification of either "Force Module" or "Force Module Description."

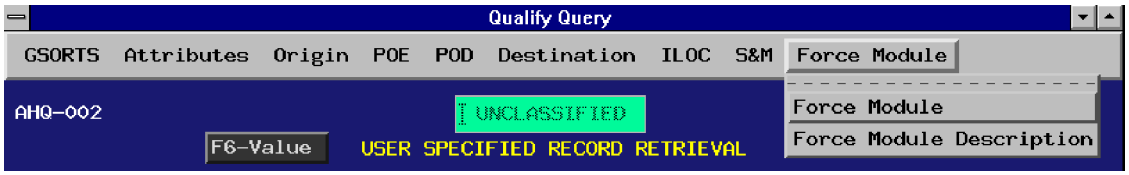


Figure 3-8: Force Module Pull-Down Menu.

Pointing and clicking on Force Module posts Force Module to the active data specification area. After selecting an operator from the left column, point and click on F6-Value. A pop-up will appear showing the operator selected and asking to enter the specific value. Enter the exact value of the Force Module or use appropriate wildcards as necessary.

Attributes Pull-Down Menu. The Attributes Pull-Down menu is the list of all requirement TPFDD data elements that did not specifically fit with a geographic location in the deployment chain or are not part of S&M or Status of Resources an Training System (SORTS) files. A point and click activates the pop-up window.

Selections in the pull-down menu that are followed by a > symbol have a follow-on cascading menu.

- **REQID**. The requirement ID selection can retrieve a single requirement of any type.
- **ULN/CIN/PIN**. This cascading menu allows specific designation of types of requirements desired in the retrieval.
- **Requirement Type Code**. Allows qualification on category of record, ULN, CIN, or PIN.
- **Force Description**. Allows qualification on the requirements description.
- **Project Code**. Allows qualification on the project code field.
- **Reserved Nonbaseline**. Allows qualification on the reserved nonbaseline field.
- **Reserved Baseline**. Allows qualification on the reserved nonbaseline field.

- **Unit Attributes**. This cascading menu provides 23 different unit attributes available for qualification, including unit cargo detail information (level one through four). These items should not be confused with the GSORTS type information from the Unit Information (UI) pull-down. Some items are duplicated, but the unit attributes all come from a requirement record in the GCCS JOPES Core Database.

- **Non-Unit Attributes**. Attributes Non-Unit Pull-Down Menu provides listings of both Non-Unit Cargo and Non-Unit Personnel items for qualification.

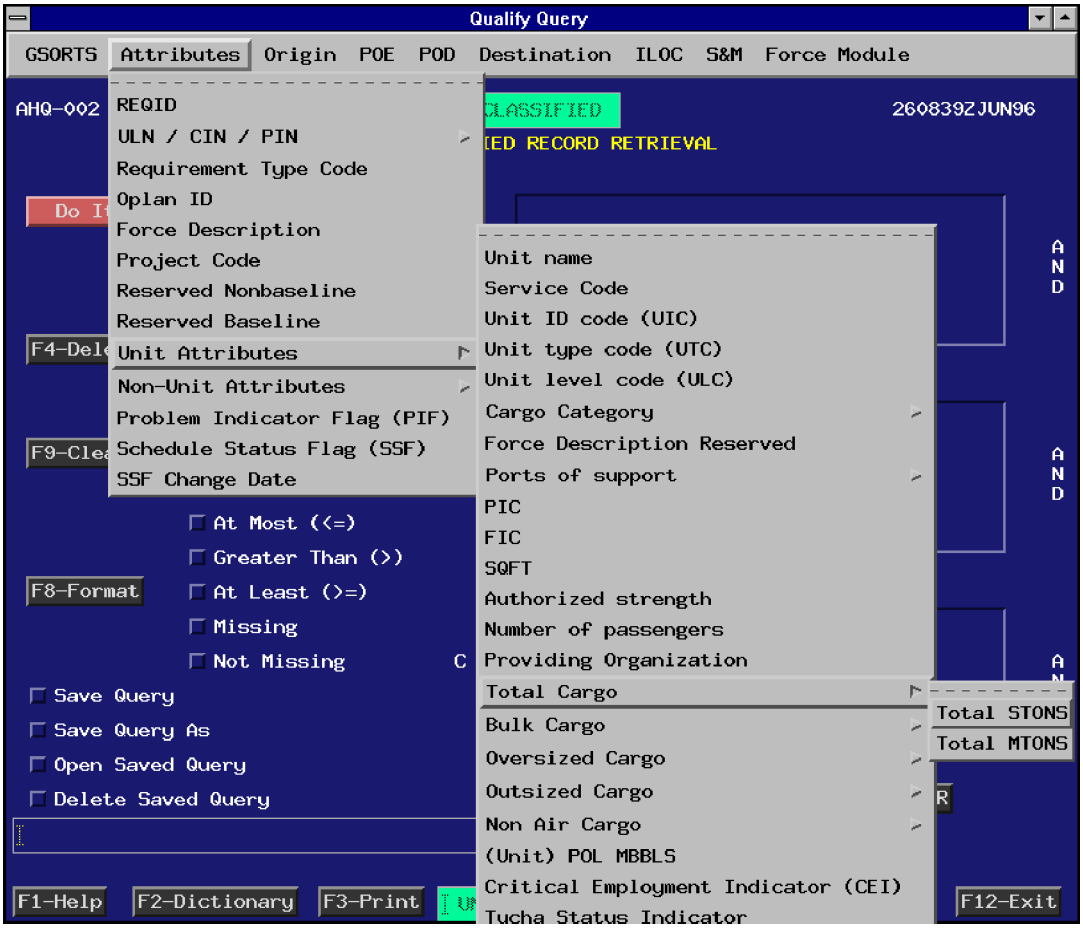


Figure 3-9: Unit Attributes Total Cargo Pull-Down Menu.

- **Problem Indicator Flags.**

- **Schedule Status Flags (SSF).**

- **SSF Change Date.**

Deployment Pull-Downs. The next five pull-down menus are directly related to the deployment path of the requirement. With the exception of Intermediate Location (ILOC), each

option has (almost) identical sub-options. Selecting one activates a pull-down menu containing retrieval options based on that type of location as it relates to the deployment path.

- **POD Pull-Down**. The Port of Debarkation (POD) Pull-Down menu (Figure 3-10) provides 12 attributes that may be used for qualification.

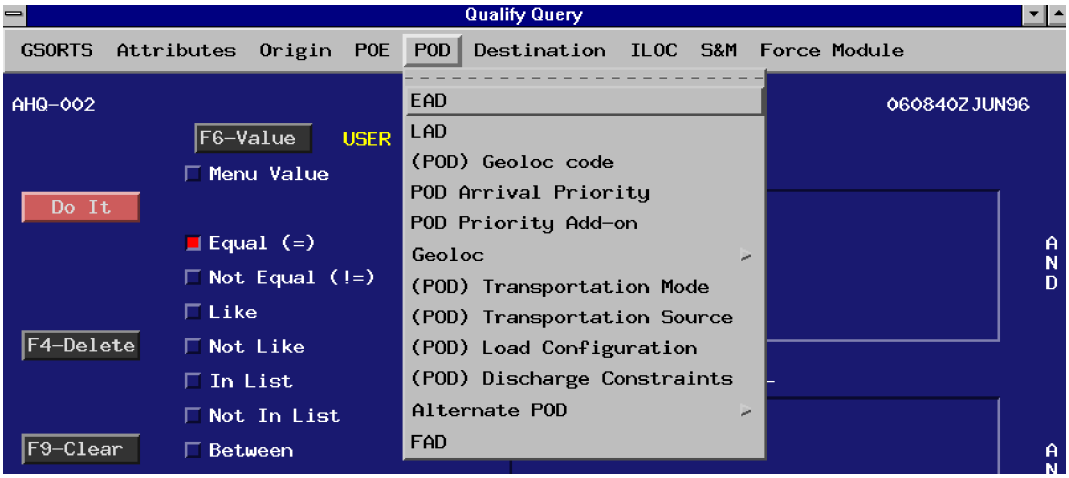


Figure 3-10: POD Pull-Down Menu.

Of these nine, two have additional follow-on cascading menus. Notice that the elements available are those that are related directly to that location in the deployment path. For the POD, Earliest Arrival Date (EAD) and Latest Arrival Date (LAD) are presented. The only date available for qualification of the Port of Embarkation (POE) is the Available to Load Date (ALD).

GEOLOC Cascading Extension. The Geographic Location (GEOLOC) Cascading Extension (Figure 3-11) provides an additional eight ways to further focus on specific data elements within POD path. One of these, Country/State has additional cascading menus attached.

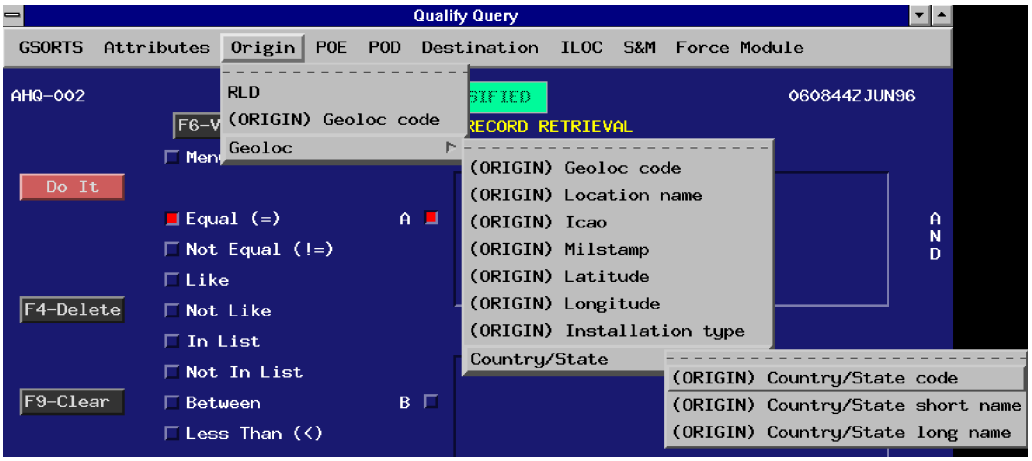


Figure 3-11: GEOLOC Cascading Extension.

Tear-off. To help use these deep paths more easily, a tear-off function has been added. This option allows "pinning" the actual pull-down to the screen while making multiple selections for the query without having to retrace the paths. Point and click on the pull-down's title to "pin" the menu to the screen. More than one menu may be “pinned”, moving them around with a point, hold, and drag of the mouse.

S&M Pull-Down Menu. The S&M Pull-Down menu provides 14 qualification items for the query as shown in Figure 3-12.

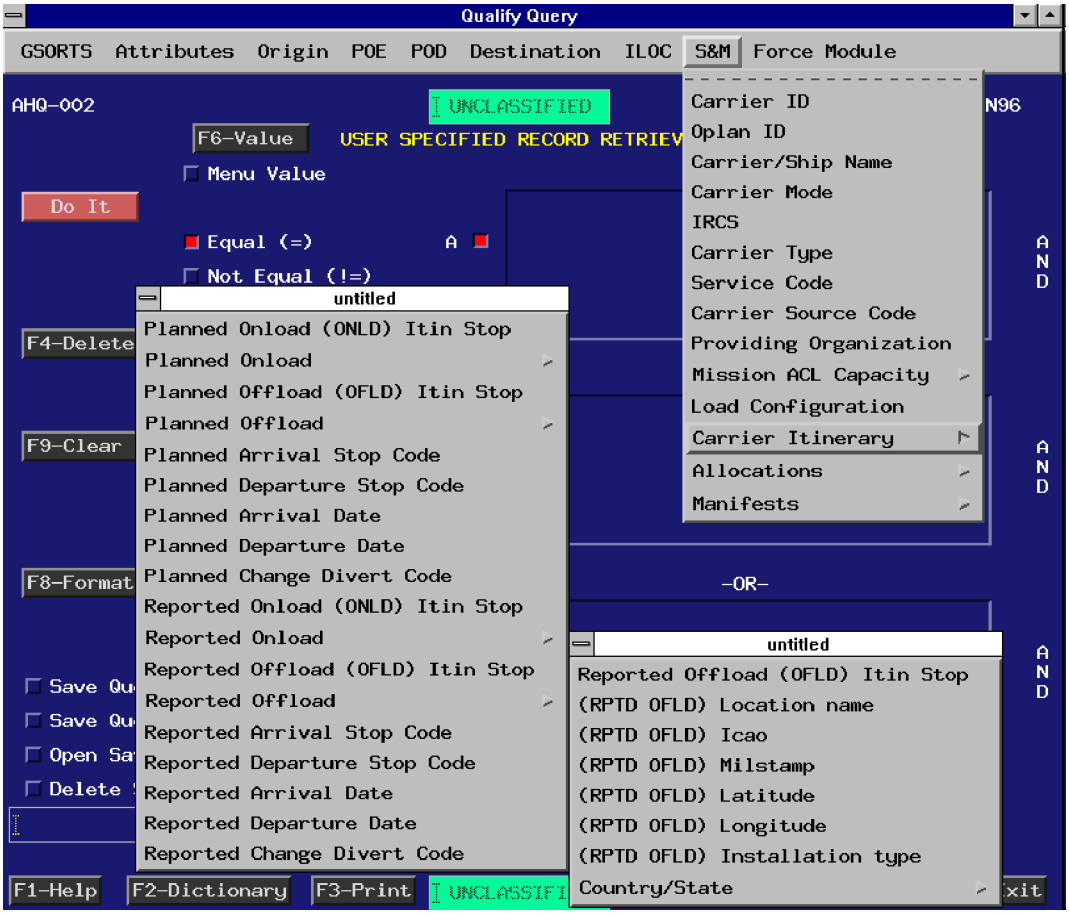


Figure 3-12: S&M Pull-Down Menu.

GSORTS Attributes Pull-Down Menu. The GSORTS information used in planning is also available for queries as shown in Figure 3-13.

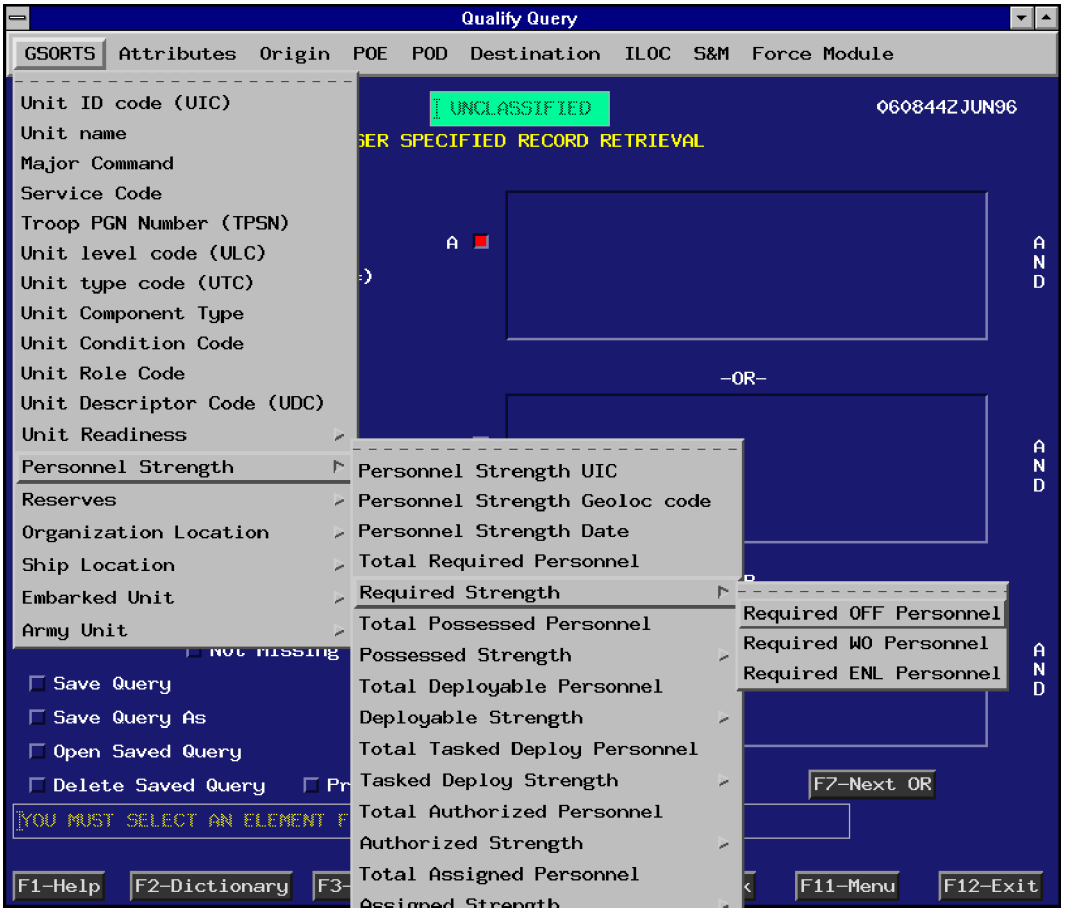


Figure 3-13: GSORTS Attributes Pull-Down Menu.

Operators. Having picked data elements for qualification, the user must tell the system what to do with the operator, such as, finding data elements that are a specific value or range of specific values. Symbols, called operators, perform that function. The operators (Figure 3-14) are located on the left side of the Qualify Query screen.

Each time an attribute is selected from the pull-down menus, an operator may be selected to tell the system how that attribute should be treated in relation to the value. The operators are available on the screen and are selected with a simple point and click. When selected, the operator is stored in the system for use with the F6-Value entry activity. This action completes the second step of creating a query line. The operators are:

- **Equal (=)**. Exactly Equal To. This operator is used when an exact match to a specified value is desired. A specific value must be entered to complete the line. Clicking on the "F6-Value" button causes a pop-up to appear with the operator displayed and allows entry of the exact value for which to search. Wildcards are not useable here because the system will look for the exact wildcard character in the string of characters instead of any character in that spot.

- **Not Equal (!=)**. This operator retrieves everything except an exact match of the entry (this option can be used to write a shorter equation when the exact match equation is longer).

- **Like**. Like means similar to. It is used most often in conjunction with wildcard searches. For example, if information is desired about all GEOLOCs that begin with an F, the value entry would be F* (wildcard characters will be discussed in detail in Paragraph 3.2.7).

- **Not Like**. Not like means not similar to. It is used most often in conjunction with a wildcard search when writing the "not like" statement is shorter than the "like" statement.

- **In List.** This operator will retrieve all records with the selected parameter equal to values contained in a list. The user will be prompted for a value or series of values.

- **Not In List.** This operator will retrieve all records with the selected parameter values of everything not in the list. The user will be prompted for a value or a series of values.

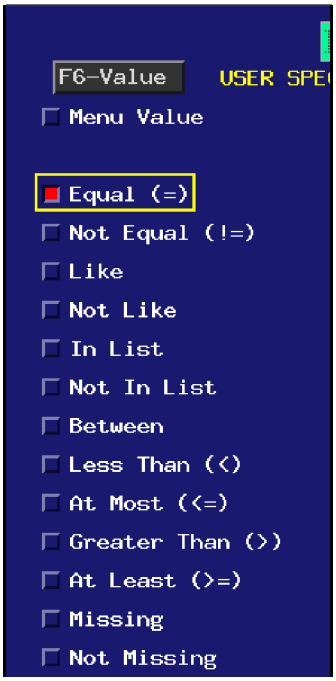


Figure 3-14: Operators.

- **Between.** This operator will retrieve all records inclusive, between starting and ending values. The user will be prompted for upper and lower bounds.

- **Less Than (<)**. This operator will retrieve all records with the selected parameter value less than the specified value, excluding the value entered. An example is when LAD<C010 is used as the operator and value, the activity must have occurred before C010.

- **At Most (<=)**. This operator will retrieve all records with the selected parameter value less than or equal to the specified value. In other words, items whose value is less than or equal to the entered value (e.g., LAD<=C009 gets the same results as LAD<C010.).

- **Greater Than (>)**. This operator will retrieve all records with the selected parameter value greater than the specified value, excluding the value entered. An example is when LAD >C010 is used as the operator and value, the activity must have occurred after C010.

- **At Least (>=)**. This operator will retrieve all records with the selected parameter value greater than or equal to the specified value. In other words, items who's value is greater than or equal to the entered value (e.g., LAD>=C011 gets the same results as LAD>C010.).

- **Missing**. This operator will retrieve all records with the selected parameter value of null. The data attribute selected is empty.

- **Not Missing**. This operator will retrieve all records with the selected parameter value of not null. The data attribute selected is not empty.

CAUTION: Be wary of retrievals on fields that may have NULL values. TPFDD data is often incomplete.

Note: When in doubt, check for missing values.

F6-Value Button. This option allows manual entry of a value in the data specification line. It can only be selected after a data choice is made, an operator has been chosen, and a specific value is needed.

Actual Value. An actual value would be entered, for example, to qualify on all records where the POD is equal to a Geographic Location Codes (GEOCODEs) that equal "ESGM". Select the F6-Value button and a pop-up appears (Figure 3-15).

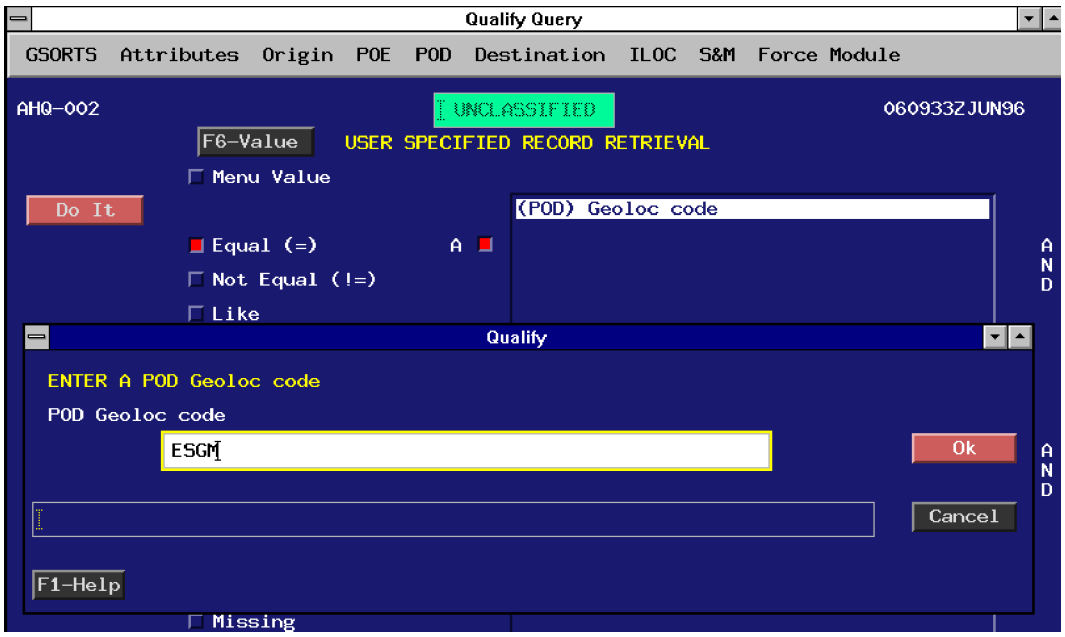


Figure 3-15: F6-Value Pop-Up Window.

The screen shows the attribute selected, the operator selected, and allows entry of the value. After entry, select OK to process, cancel if desired, or Help if needed.

Pick Value. Some selections may have a pick list that will pop-up on the screen to select from.

Menu Value. This option allows the user to compare two data elements, for example when POD=POE. Logical operators for this condition include: Equal, Not Equal, Less Than, At Most, Greater Than, and At Least.

Screen Mechanics. The screen mechanics refer how to actually fill out the Qualify Query screen and the relationships between the sections (Figure 3-16).

Figure 3-16: Qualify Query Screen.

Data Specification Area. The blank blocks on the right side labeled B:, C:, and D:, make up the data specification area. Query lines that define the retrieval are built here. By pointing and clicking on pull-down/cascading menu selections of attributes, operators, and values in the correct order, will post those selections to the active block. A block is activated by pointing and clicking on the toggle just to the right of the letter. Within the boxed area, each line is considered an "and" statement. Between the blocks, the statements are "or" (Figure 3-17).

Note: The maximum number of "and" lines that can be created in any one of the blocks is unlimited.

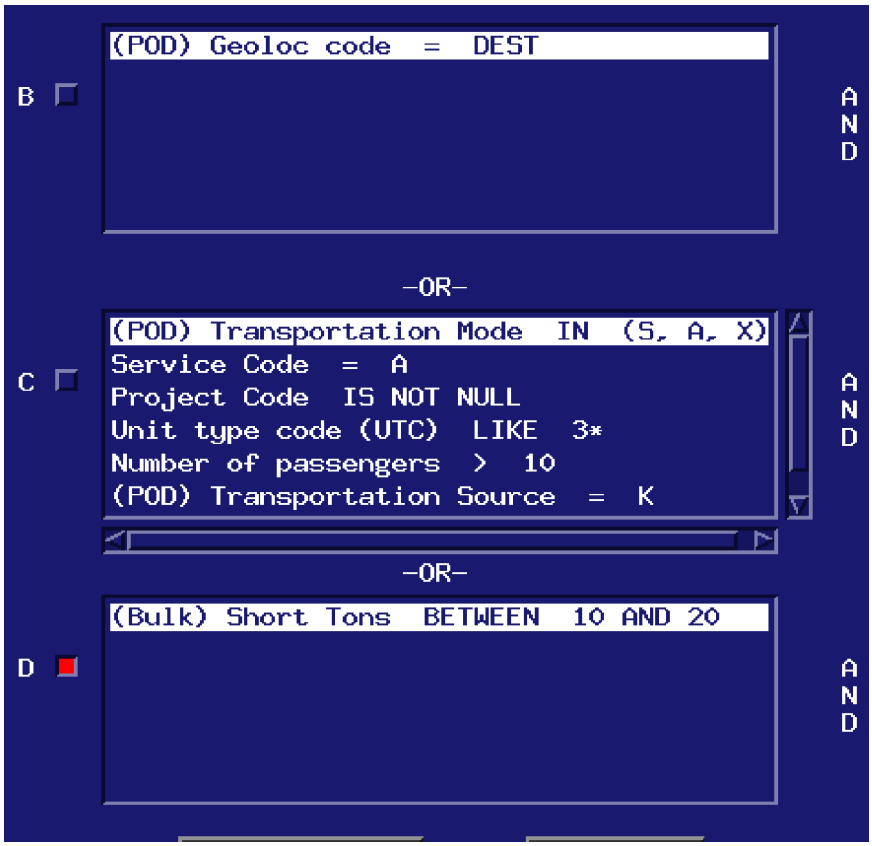


Figure 3-17: Data Specification Area.

"AND" Operator. The association among lines within an area is an "and" relationship. The more lines (qualifiers) entered into a block, the more limited the retrieval will be, i.e., less records meet all the requirements listed so fewer records will be retrieved.

The "and" relationship means that records must meet all specifications within an area to be included in the retrieval.

For example, the first line in the "A" block could contain a query for ULNs, while the second line in the "A" block could further limit the retrieval to those provided by the Army (e.g., line 1 is ULNs like AA*** and line 2 is Service = A).

"OR" Operator. The relationship between blocks A, B, and C (and beyond) is an "or". An "or" relationship expands the size of a retrieval by retrieving data that meets either set of criteria, thus pulling more records into the query. "Or"s are like multiple retrievals within one retrieval.

The resulting collection includes records that meet all specifications in any one of the blocks, independent of each other.

For example, if all Army ULNs and Cargo Increment Numbers (CINs) are desired, use block "A" to qualify Army ULNs and block "B" to qualify the Army CINs.

Note: Block "A" should not be used for both ULNs and CINs because a single record cannot qualify to be both an ULN and a CIN. The menu pick, REQID in the Attribute pull-down menu, can be used to pull all requirements in one block statement.

As many as 20 “or” conditions are supported by selecting **F7-Next OR**. The operator “in list” behaves in the same manner as multiple “or” conditions and will frequently be more useful to the operator. **F5-Previous OR** allows navigation to preceeding OR boxes.

F9-Clear. The F9-Clear button is activated by a point and click on the screen or by pressing the F9 key on the keyboard. It clears the entire screen, all “or” blocks, in preparation for the next retrieval.

Letter Toggles. The letter toggle button (A:, B:, C:, D:) determines which data specification block is active. The attributes and operators selected will post to that block, building the query line by line.

Scroll Bar. A scroll bar will appear to the right of an "and" area when the area beyond what is normally visiable on the screen is filled in. If this condition occurs, use the scroll bar to view query lines not currently visible in the window. The scroll bar also acts as a reminder that more data exists than is currently on the screen.

Menu Bar. Start building the query lines by selecting the attribute needed and activating one of the buttons on the Menu Bar above the user specified record retrieval area. The choices and functions of these buttons were previously described. Remember the selections from the Menu Bar pull-downs may also be used as data values for each query line after the attribute and operator have been selected.

In some cases, the pull-down menus open paths to additional cascading selection menus that allow further refinement of the choices. Remember, an option followed by an arrow ">" indicates additional cascades are available.

As each selection is made from the Menu Bar and subsequent cascades, the choice is pasted to the query line in the active data specification block (button depressed) on the first available line. To be complete, the query line must begin with a topic, followed by a qualifying operator, and end with a data value.

3.2.5 Constructing Logical Retrievals

The relationship among lines within a data entry area (A1 through An, for instance) is an **AND** relationship. This means that records must meet all specifications entered on all lines within that area to be included in the retrieval.

For example, the entry:

A - Requirements LIKE "U*"

would retrieve all ULNs; while the two lines:

A - Requirements LIKE "U*"
A - Service = "A"

would retrieve ONLY the Army ULNs.

The relationship between data entry areas (A, B, and C) is an **OR** relationship. The resulting collection will include records that meet the specifications in any one (or more) of the areas.

For example, the two sets of entries:

A - Requirements LIKE "U*"
A - Service = "A"
B - Requirements LIKE "C*"
B - Using Organization = "A"

would retrieve both the sets of all Army ULNs, and all Army CINs.

3.2.6 Common Problems With Retrievals

Be wary of hidden data entry lines. If a seemingly obvious retrieval does not perform as expected, check for a hidden data entry line that is modifying the overall effect. Scroll down and modify the data entry line as required.

Particularly when retrieving on text fields, expect data errors, spaces/blanks where there should not be any, and unusual spellings. Numbers in description fields often are preceded by zeros.

Double check for the correct dates and locations.

Use the results of the query to solve problems with the query. The results will often indicate the errors with the query.

When retrieving some characteristic of cargo, check whether it is only applicable to ULNs, or to both ULNs and CINs; to one form of lift rather than all forms; and whether it applies to standard

or non-standard ULNs. There are significant differences between cargo values retrieved using the Unit Attributes Menu and those using the Cargo Attributes Menu.

3.2.7 Wildcards

Wildcard characters may be used to assist retrievals. Wildcards are special characters that substitute for one or more characters of the retrieval text. AHQ supports four wildcard characters:

*** or %** (Asterisk or percent) Which represents any number of characters, from none to all

? or _ (Question Mark or Underbar) Which represents a single character.

3.2.8 Examples

ship* would search for any character string with **ship in the last four positions and no characters following. It would retrieve not only all "ship" entries, but "leadership", etc.

???ship would search for any character string with **ship** starting in the fourth position with any three single characters preceding. It would retrieve "gunship", but not a standalone "ship". The question mark character (?) can be useful when searching for a specific number of characters in a field.

?AP as an installation type code for a port will retrieve all records deploying through either a MAP, IAP, JAP, or CAP coded airfield.

ST LOUIS would find all instances of St Louis, anywhere in a text entry; this would be useful if the actual full name of the St Louis airport was uncertain.

The "=" retrieval operator REQUIRES AN EXACT MATCH to qualify a record. Since an exact match is not requested with a wildcard value, the "LIKE" operator MUST BE USED.

A wildcard search will not find missing or **NULL** fields.

Delete Button. The Delete button is used to delete a specific query line within one of the query specification blocks. First, highlight the line with a point and click, then point and click on the Delete button. Make sure the appropriate "OR" group is selected.

Stored Queries. The Stored Query options; save, save as, open, and delete saved query, are available in the lower left-hand corner of the Qualify Query Screen.

Save Query. To save a query (format, not data) for later use, i.e., a retrieval that is desired again in the future, select Save Query (lower left). The option stores the query just built or modified.

Also, this option overwrites the current query. A stored query is saved under a name so that it may be recalled with the Retrieved Stored Query option.

Save Query As. This option provides a pop-up window that allows entry of the name, or a new name, to enable the retrieval of that query (file) for later use.

Open Saved Query. This option provides a pop-up window requiring the entry of the name of the query (file) name to retrieve the query format for use. The option of selecting OK to pull the file, cancel or Help if available if needed.

Delete Stored Query. This option, like the retrieve option, also provides a pop-up window. To delete a stored query, type in the query (file) name and select OK.

Information Line. The information line at the bottom of the screen is where the system communicates about the internal activities of the system based on keystrokes.

Function Keys. The Function keys across the bottom of the screen, F1-Help, F2-Dictionary, F3-Print, F10-Back (one screen), F11-Menu, and F12-Exit have been explained previously.

Do It. The Do It command always executes a query. When the query (retrieval) is completed, the system will automatically display the retrieved collection of records on screen or an error message is displayed.

F8-Format. The F8-Format button provides the Format Report Display screen (Figure 3-27).

3.3 AD HOC QUERY RESULTS

3.3.1 Display

The results displayed upon selection of the **Do It** button show data elements that were selected on the initial screen (Figure 3-1). In the case of a Requirements selection, the collection displayed is the set of qualifying records that are in the "collection." The collections will vary as a result of the initial data set selected. This section of the screen also has several other buttons that provide additional functionality (Figure 3-18).

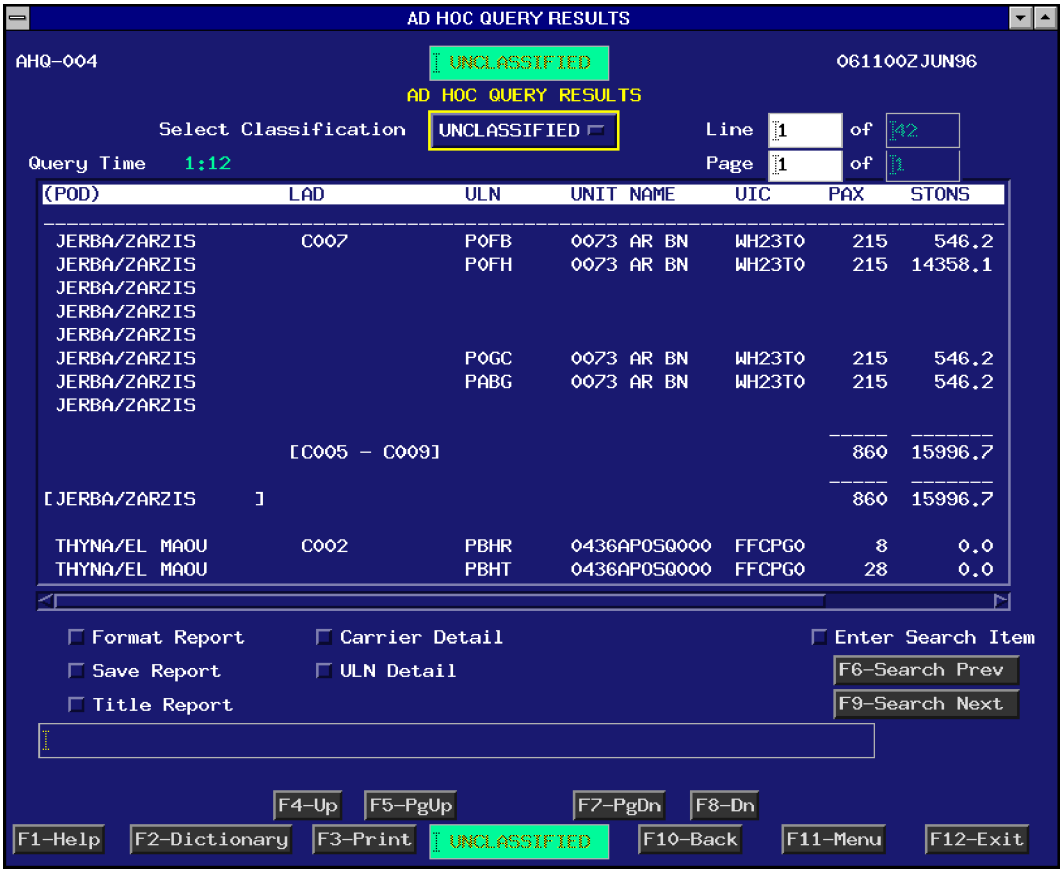


Figure 3-18: Ad Hoc Query Results Display.

Query Time. The duration of queries run from AHQ are displayed at the top left of the result display screen. This can be useful when determining to run subsequent queries on screen or in batch (selected on the AHQ-001 screen). See Figure 3-19.

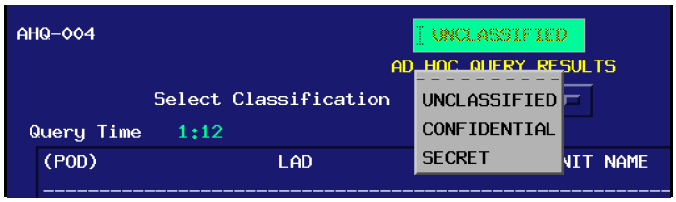


Figure 3-19: Query Time and Select Classification.

Select Classification. System high classification is presented on the AHQ-004 screen. The user is afforded the opportunity to modify this classification by use of the selection buttons. Subsequent print outs will carry this classification caveat. See Figure 3-19.

Page Navigation. Figure 3-20 provides an illustration of navigation capability within the list box presenting the results of each query. Pages are calculated at the rate of 52 lines per page. The function keys (PgUp, PgDn) at the bottom of the page also assist with navigation within the list box.

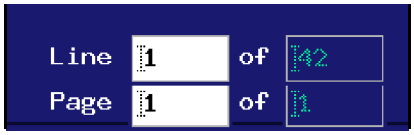


Figure 3-20: Page Navigation.

Search Up/Down. Allows searching through the records in the collection. See Figure 3-21.

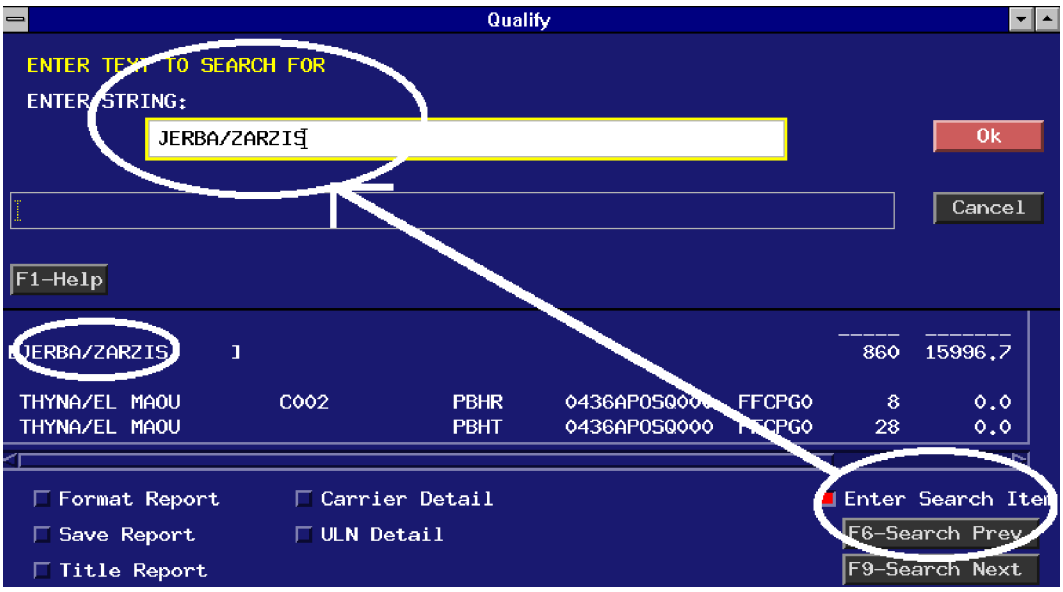
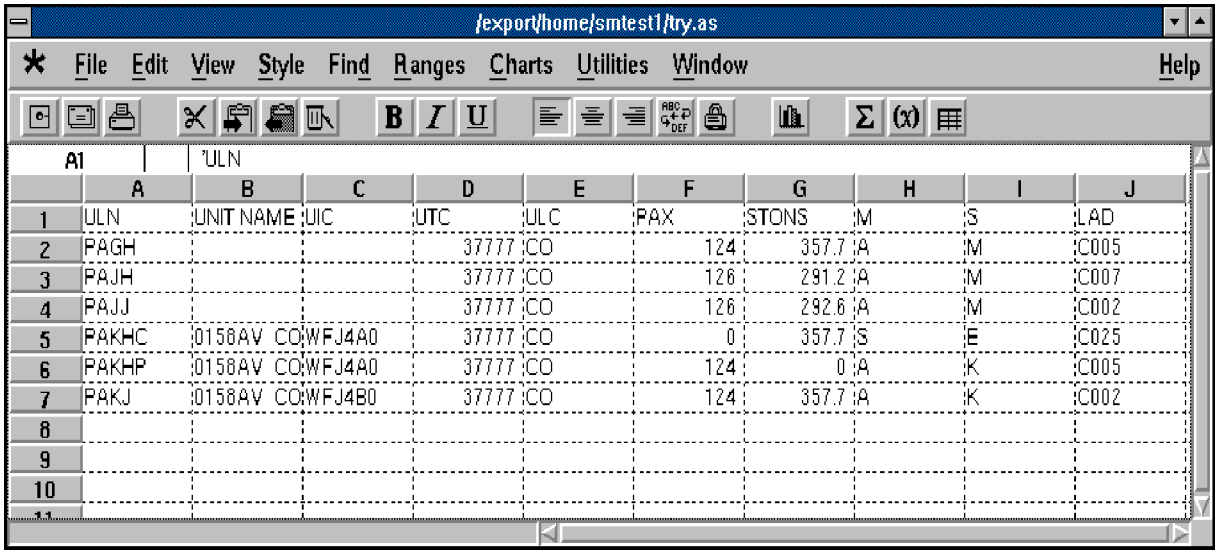


Figure 3-21: Entry of Search String.

Format Report. Selection of this button allows the user to initiate an Applix session. Output as displayed on the screen is ported directly to the spreadsheet portion of Applix for manipulation, graphing, and reports as desired by the user. Directions for the use of Applix are in Appendices B and C. When selected, a pause of a few seconds will occur and output is presented in a format similar to Figure 3-22.



	A	B	C	D	E	F	G	H	I	J
1	ULN	UNIT NAME	UIC	UTC	ULC	PAX	STONS	M	S	LAD
2	PAGH			37777	CO	124	357.7	A	M	C005
3	PAJH			37777	CO	126	291.2	A	M	C007
4	PAJJ			37777	CO	126	292.6	A	M	C002
5	PAKHC	0158AV CO	WFJ4A0	37777	CO	0	357.7	S	E	C025
6	PAKHP	0158AV CO	WFJ4A0	37777	CO	124	0	A	K	C005
7	PAKJ	0158AV CO	WFJ4B0	37777	CO	124	357.7	A	K	C002
8										
9										
10										

Figure 3-22: Applix.

The user is presented the opportunity to save output as desired. When the session is finished, select the FILE pulldown menu and pick EXIT.

Save Report The user may specify the report be saved to a comma delimited ASCII file at the directory assigned the user by the System Administrator. From this directory, using COE tools, the file may be conveyed to other media or transferred via File Transfer Protocol (FTP) to the preferred Commercial Off-the-Shelf (COTS) package (e.g., MSOFFICE, WordPerfect, AmiPro, etc.). The location of the output is by default initally placed at /h/users/<*UserId*>/Ahq/Ahq_Formatted_Results_YYMMDD_HHMMSS. The result is a tab delimited file intended to be imported into a spreadsheet or wordprocessor of the users choice.

Title Report. The user is able to title each report up to 60 characters. The title will be displayed on the printed output. The default title is AHQ Report, see Figure 3-23.

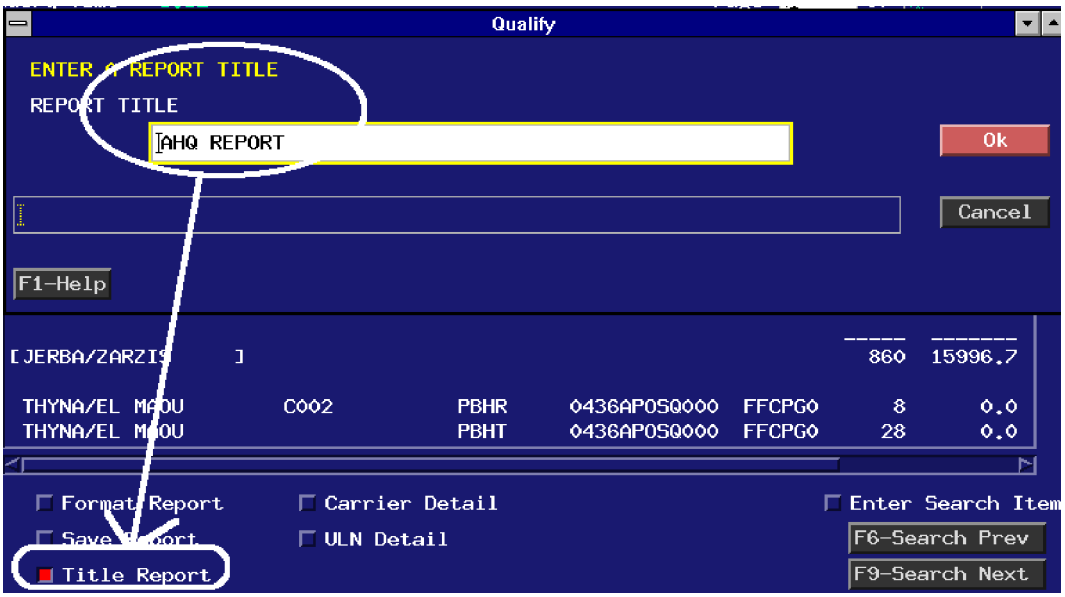


Figure 3-23: Title Report.

3.3.2 Detail Confirmation Screens

Detail confirmation screens enable the user to determine the success of the record qualification process and are displayed near the bottom of Figure 3-18. If appropriate for the type of data, a radio button may be provided for either: ULN Detail or Schedule Detail information. Selection of a button will provide detailed information on the record selected (Figures 3-24, 3-25, and 3-26).

The user may desire to select other data fields or format the results further by selecting F-10 BACK and selecting the REPORT and then, select FORMAT REPORT DISPLAY.

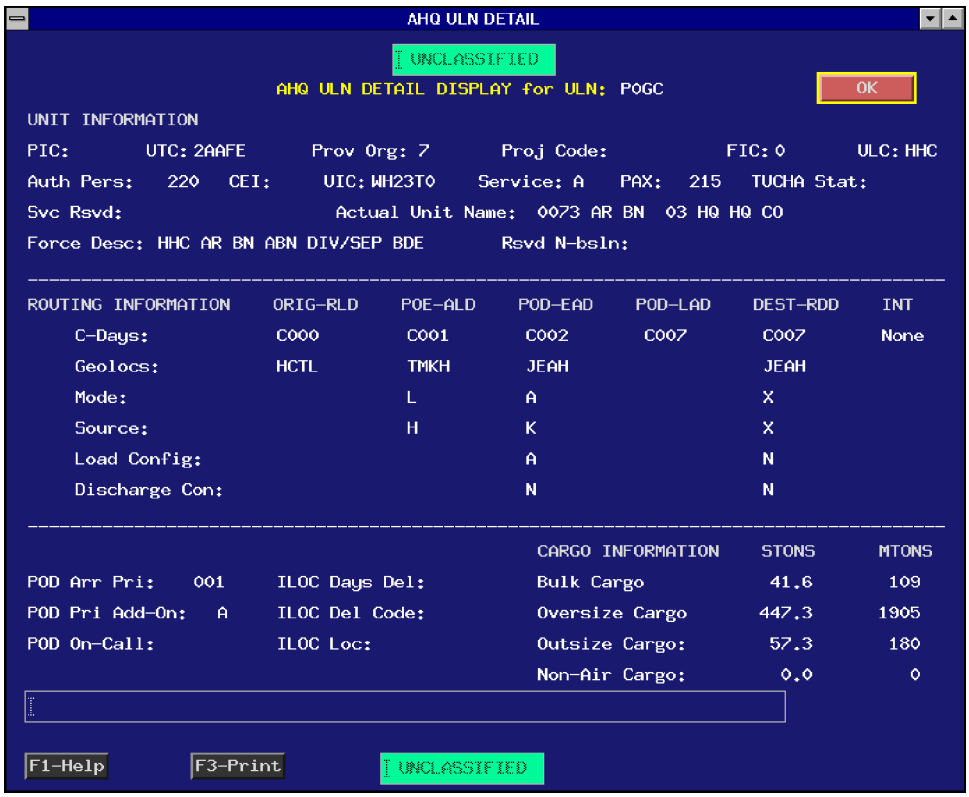


Figure 3-24: The ULN Detail Screen.

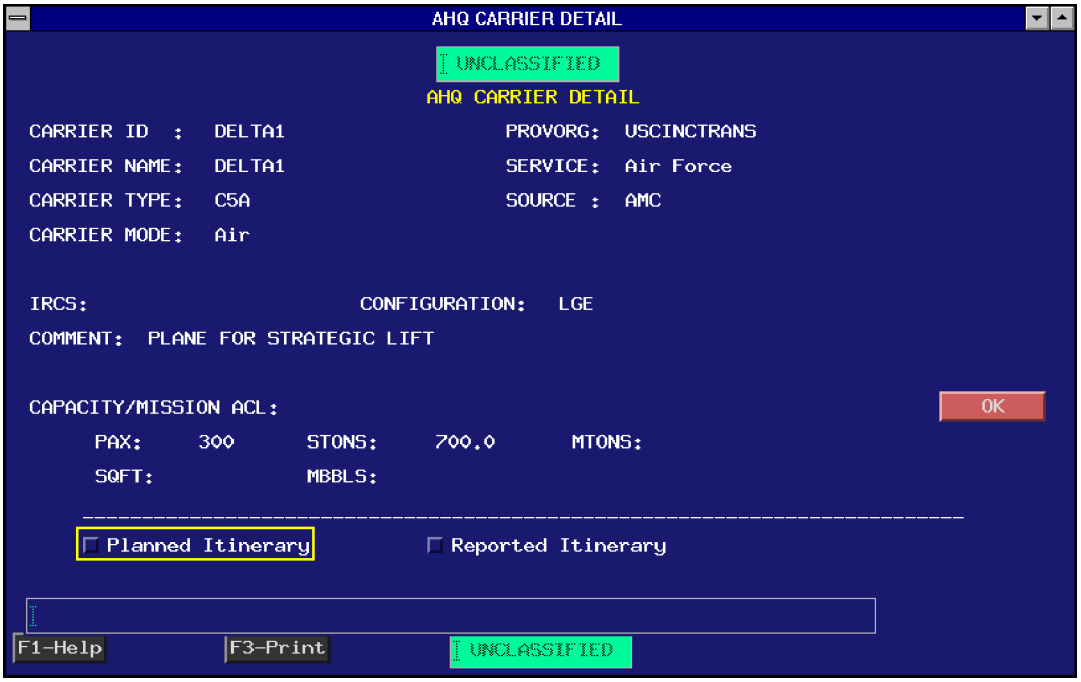


Figure 3-25: ULN Schedule Detail Screen.

Figure 3-26: Onload Offload Help/Selection Screen.

3.4 FORMAT REPORT DISPLAY

This option provides the ability to design the output format (report or display) for a retrieval. This is a critical step in the process because "how" the material is presented to the reviewer can greatly facilitate understanding and influence the decision(s) made as a result of the report (Figure 3-27). Keep it as simple as possible. A custom designed report that has only the needed information is much more useful than a complex report. The command line shortcut from the main screen is DISP.

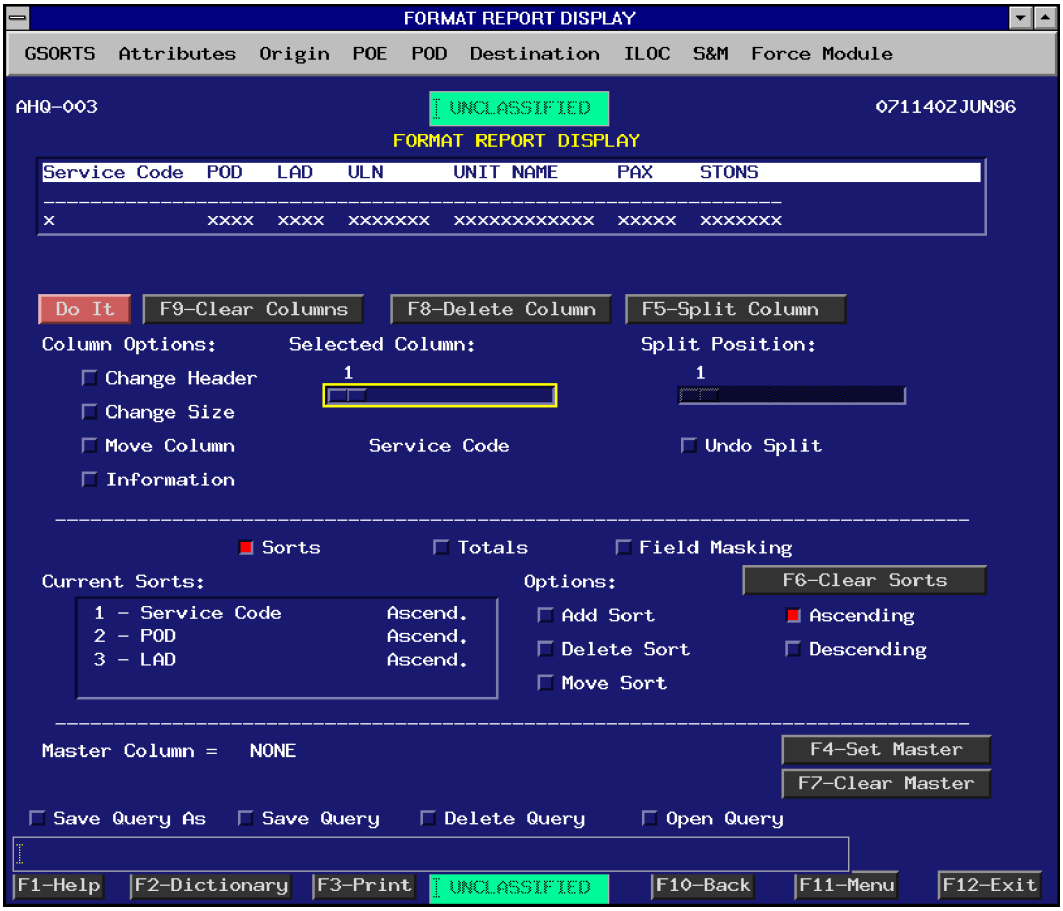


Figure 3-27: Format Report Display Screen.

There are three areas of the screen which embody separate functions dealing with the manipulation of the output. The first function is the selection of fields to be displayed (Figure 3-28). The second function is the sort and group activities, and the last function is the use of the Master function.

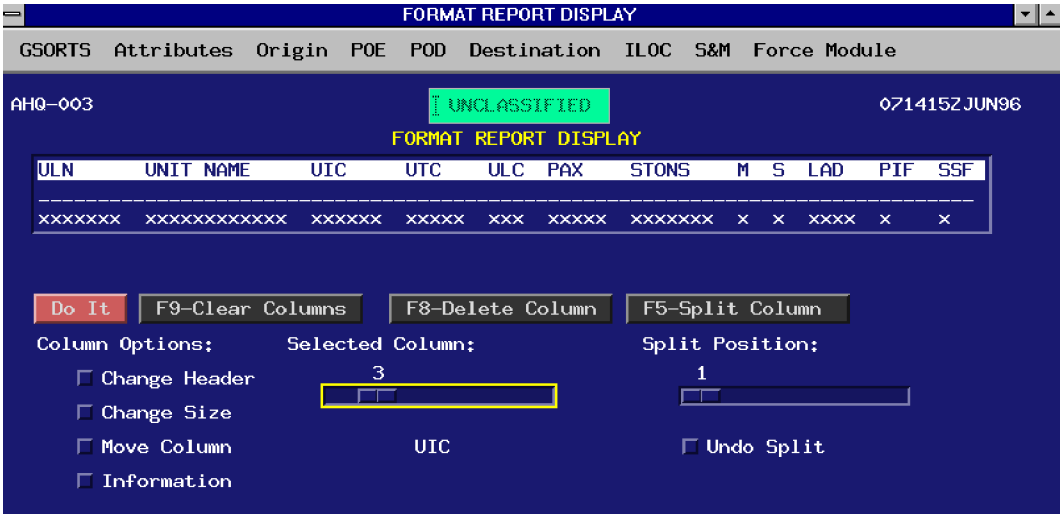


Figure 3-28: Selection of Fields.

3.4.1 Selection of Columns

Depending upon the choice of categories selected on the initial screen, a defaulted set of fields will appear. Columns may be inserted, deleted, split, header changed, resized, and/or moved.

Note: Be mindful that addition or deletion of columns may change relationships between data elements, e.g., deleting columns with a one-to-many relationship such as ULN to Cargo Category Codes. This can cause the previously viewed collection to change materially.

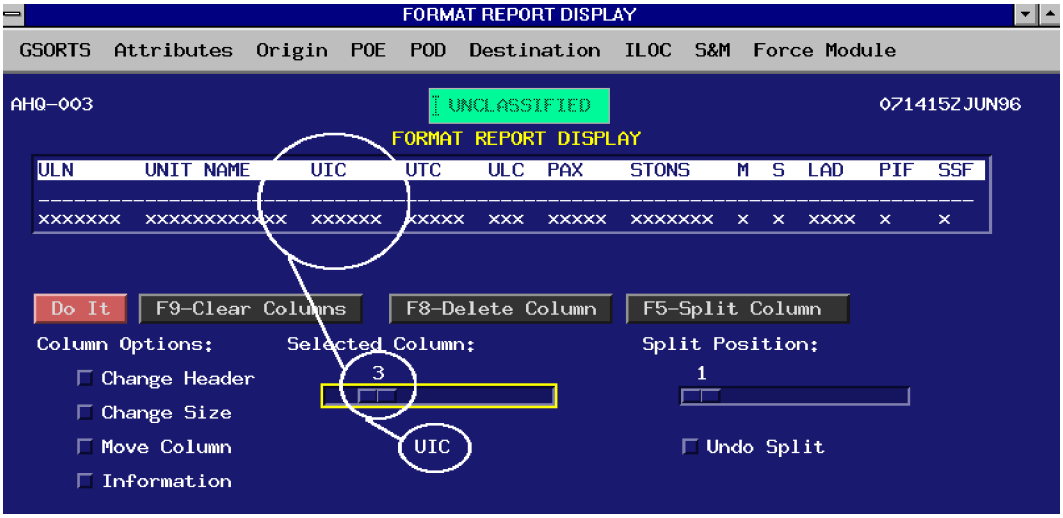


Figure 3-29: Insertion of Columns Display.

3.4.1.1 Insertion of Columns. To add a column to the report, use the same convention as applied in the qualification routine, select the appropriate field description from the pull-down menu's above.

The field will be inserted at the position designated by the column slider bar. For instance, if the slider bar is at position 3, the field will be inserted at position 3, see Figure 3-29.

3.4.1.2 Do It. The Do It button causes the system to initiate the retrieval as designed.

3.4.1.3 F9-Clear Columns. The F9-Clear key clears the entire display to start a new display format.

3.4.1.4 F8-Delete Column. The F8-Delete Column deletes the column specified by the column position slide bar.

3.4.1.5 F5-Split Column. The F5-Split Column slider bar splits the column specified at the column position slide bar. Slide bars move upon depression of the mouse. The position of the cursor (field) is displayed upon release of the mouse, in the case of Figure 3-28, the cursor is at column 3, Unit Identification Code (UIC) with the split position on the first character. In Figure 3-30, the selected column UNIT NAME would be split at position 10 (from the left). If desired, the user may undo the previous splitting by selecting that button.

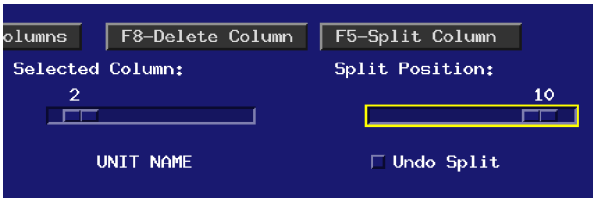


Figure 3-30: Slider Bar.

The column split will create a new field which will require a name. A pop-up will be presented allowing the user to name the field.

3.4.1.6 Column Options. The Column Options buttons; Header, Size, and Move allow changes in the name, size, or position of each column. The **Information** button displays current selection parameters on the column selected.

The Header button allows changing the column name by providing a pop-up window to enter the information (Figure 3-31). For example, Requirement could be changed to ULN, CIN, or PIN as appropriate.

The Size button allows the user to control of the width of each column. It works in a similar fashion to the Header button. The user may select the number of characters for each data element desired on the screen or to be printed on the report. For example, if not all 33 characters in the Unit Description are desired because space is desired for other items, ten characters may be all that are needed.

The Move Column selection is accompanied by a pop-up menu allowing the user to select the position desired for the column to repositioned.

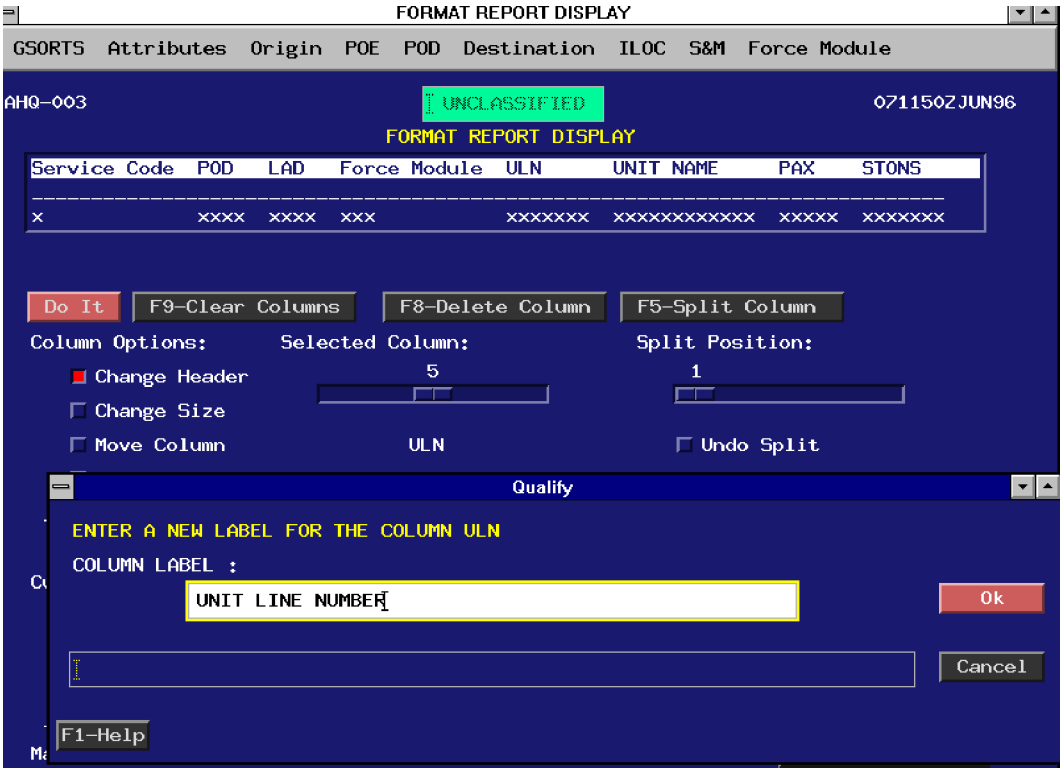


Figure 3-31: Change Header Pop-Up Window.

The Column information selection will present the user with pertinent information on the field selected as displayed in Figure 3-32.

Figure 3-32: Column Information Pop-Up Window.

3.4.2 Sort and Group Activities

3.4.2.1 Sorting. The sort options area allows establishment of how the system will order the data elements selected for the query (see Figure 3-33). The selection of proper sorts sets the stage for the production of meaningful, grouped reports.

The **Add Sort** button allows the user to select fields on which to sort. The sort position is dependent upon the row selected in the sort box, e.g., select the first row and the column identified by the slider bar will become the primary sort. The **Delete Sort** works similarly. The **Move Sort** presents the user with a pop-up window allowing the selection of position for the column selected. The **F6-Clear Sorts** removes all the sorts selected.

The **Ascending** or **Descending** buttons select whether the system sorts from a(1) to z(999) or z(999) to a(1).

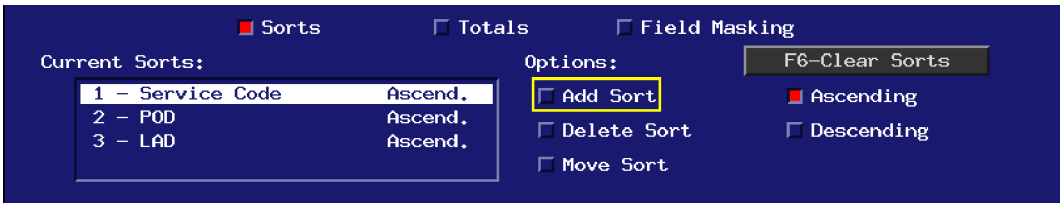


Figure 3-33: Sort Selection Function.

3.4.2.1.1 Sort Order. The A-Z sort order produces this sort sequence:

1. Spaces (blanks)
2. Numbers 0-9
3. Letters A-Z.

This means that any field with leading blanks will display at the head of the list. (And, while not proper, and not easily noticed, some TPFDD text fields may have leading blanks.)

Current Sorts. The selected sorts area displays the selections made in the Sort Options block. The F6-Clear Sorts key clears all sort options in one motion and starts the sort selection activity over.

Ascending/Descending. Upon selection of the above sorts, the user may select the sort to go in either direction, with ascending as described above. The descending sort reverses this order.

3.4.2.1.2 Common Problems with Sorting. If a sorted collection appears to be out-of-order, verify the exact data in the sort field. For example, if the collection is sorted on a text field, and that field begins with a space in some records, those records will appear before any other records.

Be wary of sorting on TPFDD data that may be incomplete or unusual. Even standard coded fields may have spurious data.

> **Note:** Cargo values may not appear as expected. There are differences between the sources for cargo values for CINs, and for both standard and non-standard ULNs. None of these three sets are comparable.

3.4.2.2 Total Options. Groups and totalled reports are the most common types of reports. Grouping and totalling enables you to summarize data for groups of records, then add: accumulated, subtotal at various intervals and grand total at the end of the report. These capabilities are available under the Total Options. This section will first discuss the operation of each of the features and is followed by a general discussion of sorting, grouping and totalling of complex reports.

3.4.2.2.1 Add Total. Total fields are selected by identifying a numeric field using the column slider bar. Upon selection of the field, the user clicks on **Add Total**, a pop-up appears allowing the user to select a field by which to group the total upon. Three types of totals are presented to the user. The user is presented the opportunity to choose between Accumulation and Subtotal, as well as a Grand total. The default increment is five days. The increment may be modified upon selection of grouping for the individual field. In the case of Figure 3-34, the Short Tons (STONS) field may be grouped by SVC or; SVC and POD or; SVC and POD and LAD. (These are the order of the sorts previously selected.)

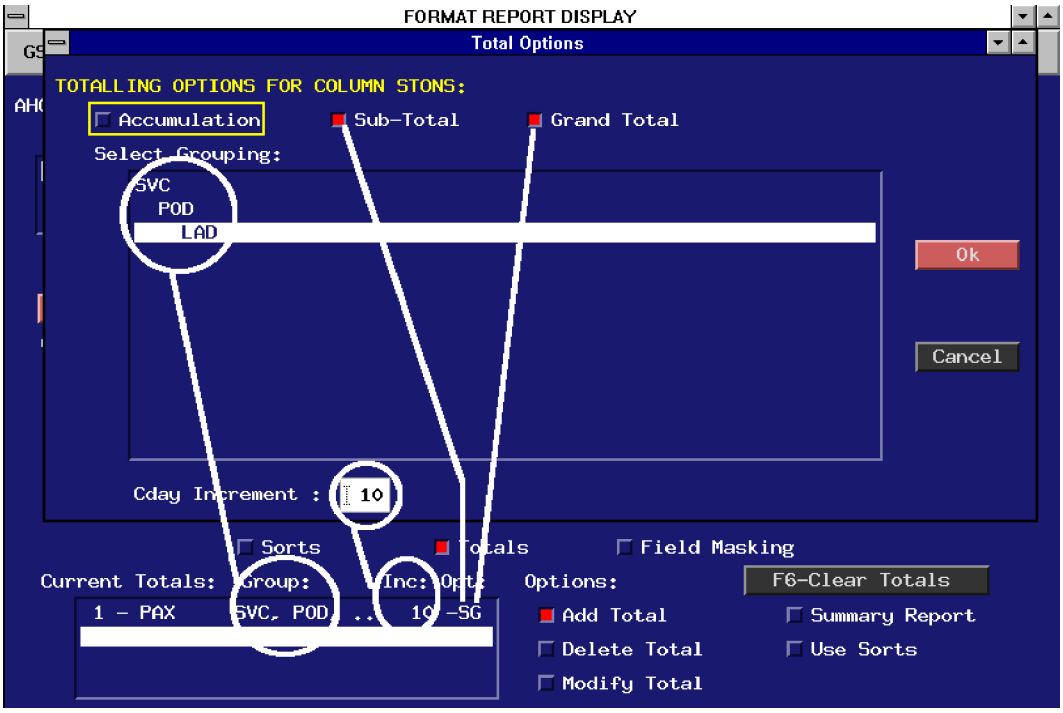


Figure 3-34: Total Options Pop-Up Display.

Depicted in Figure 3-34 is an example of nested grouping. Based upon the previously designated sorts, nesting has been both implied and inserted into the Grouping selection. This is discussed in more detail at paragraph 3.4.2.2.7.

The results of the selections are placed in the Current Totals list box. At the conclusion of the process for selecting groups, increments and types of totalling, select **Do It** on the AHQ-003 screen and results will appear in the list box of the AHQ-004 screen. A sample output is presented in Figure 3-35 where the groups for both STONS and Passengers (PAX) were Service, POD and LAD in 10 day increments with Subtotal and Grand total on STONS and PAX. Note that the grouped subtotals are identified by the grouping in brackets, [C020-C029], to ease in identification.

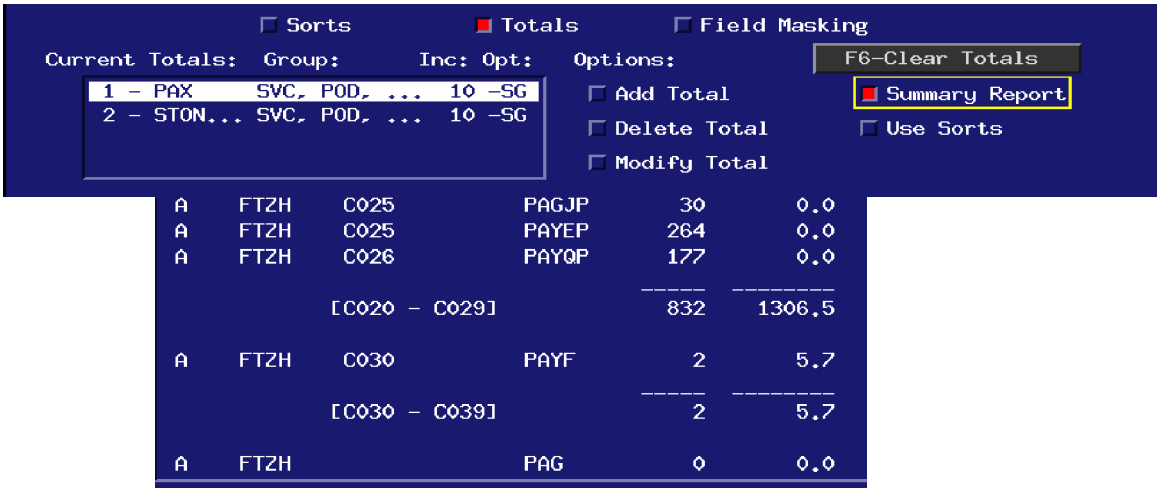


Figure 3-35: Sorted, Grouped, amd Subtotalled Results.

3.4.2.2.2 Delete Total. The **Delete Total** button requires the user to select a current total line first and then press the Delete Total button to remove a particular total.

3.4.2.2.3 Modify Total. The **Modify Total** button requires the user to select a current total line first and then press the Modify Total button to remove a particular total.

3.4.2.2.4 F6-Clear Totals. Activation of the **F6-Clear Totals** button removes all totals in the list box.

Figure 3-36: Summary Report Totals.

3.4.2.2.5 Summary Report. Activation of the summary reports button changes the presentation of the data to display values which are subtotaled in the existing report. This capability approximates the tabular reports available in the legacy JOPES F6 system. Note the Grouping and Totalling options selected in Figure 3-36. The non-summarized results are displayed in Figure 3-35. The Summary Report results are displayed at Figure 3-37.

		PAX	STONS
POD VKNP	:		
LAD C020 - C029	:	650	15249.5
LAD C030 - C039	:	0	27284.7
LAD C040 - C049	:	0	635.1
LAD C990 - C999	:	0	2474.5
SUB-TOTALS FOR POD VKNP	:	650	45643.9
POD VRJT	:		
LAD C000 - C009	:	1	308.5
SUB-TOTALS FOR POD VRJT	:	1	308.5
SUB-TOTALS FOR SVC A	:	39438	118828.4

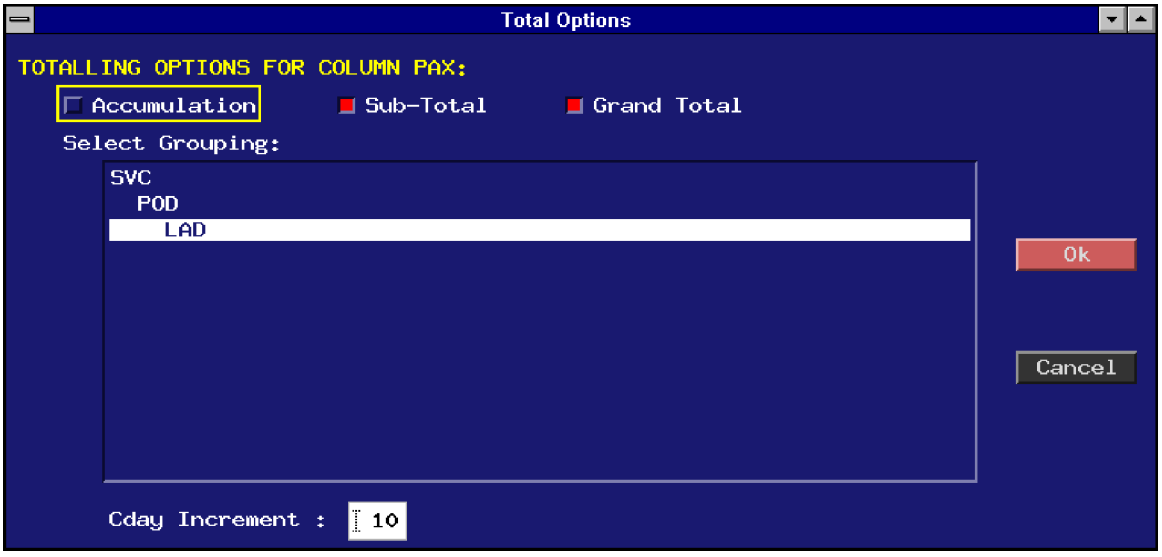
Figure 3-37: Summary Report Output.

3.4.2.2.6 Use Sorts. The Use Sorts button is provided to get the user started on the selection of logical groupings for the report. The grouping will be based on the order the sorts have been selected. Typically, the sorts selected will order the data in the method preferred for both comprehension and presentation.

3.4.2.2.7 Hints on Sorting and Grouping. Most reports created require that data be organized in groups and subgroups, in a style similar to the outline of a table of contents. AHQ allows you to establish the initial grouping and sorting properties of your data, see Figure 3-38. The groups are limited only by the number of Sorts applied to the data.

Figure 3-38: PAX Totals Grouped on SVC then POD and LAD.

Grouping data. The method you use to group data depends on the data in the field by which you



group. You can group by categories, where each category represents a unique value, such as POD's. You can group by a range of values, which are usually numeric, such as LAD, but you can also group by an alphabetic range. Nested grouping is displayed in figure 3-38. Totals on PAX will be presented

by LAD in ten day increments, with subtotals for each ten day increment, then subtotals for each POD and then a subtotal for each SVC. Grand totals will be presented for PAX and STONS.

If you elected to group by a particular data element, you can alter the grouping by selecting the grouping window, select the field desired and press **OK**.

If you use a systematic code within a field for grouping, you can add another of the same field, and split the field to enable grouping by the desired values.

3.4.2.3 Field Masking. Field Masking is engaged by selecting the field masking button displayed on Figure 3-39.

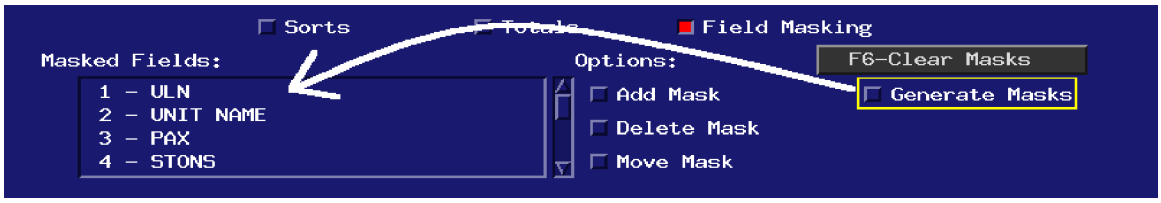


Figure 3-39: Field Masking.

3.4.2.3.1 Field Masking General. There are occasions where AHQ will be asked to present data with one-to-many relationships. Since AHQ is truly ad hoc, the application cannot know in advance the relationship of the data that is desired for presentation. This can be disconcerting, particularly when totalling numeric values, as it presents data in ways not intended. Figure 3-40 displays such an example. Note the total values for PAX and STONS.

ULN	UNIT NAME	PAX	STONS	M	S	LAD	PIF	SSF	Carrier ID
POFH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-01
POFH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-02
POFH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-03
POFH	0073 AR BN	215	14358.1	A	K	C007	N	B	AMC2500T-04
[POFH]		860	57432.4						

Figure 3-40: Results of Query with Data NOT Masked.

Although the data returned is accurate, and the totals are calculated correctly, this is probably not the result desired. The data is displayed in this manner because of the unique (one-to-many) Carrier ID's associated to one ULN. Proper use of field masking allows the user to correct this condition as depicted in Figure 3-41.

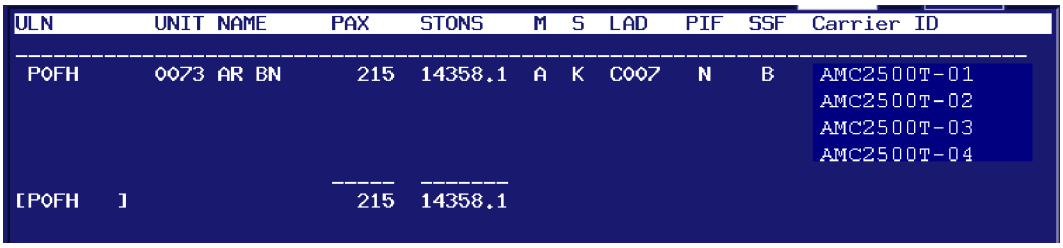


Figure 3-41: Results of Query with Data Masked.

The fields which have duplicative data, as designated by the fields masked, are neither displayed or in the case of numeric values, summed.

3.4.2.3.2 Use of Field Masking. The field selected is designated by the column slider bar. For instance, if the slider bar is at position 3, the field will be selected for masking will be inserted in the list box upon selection of the **Add Mask** button. The delete mask button requires the user to first highlight the desired field in the list box and then toggle the **Delete Mask** button. The **Move Mask** presents the user with a pop-up window allowing the selection of position for the column selected. The **F6-Clear Masks** removes all the masking selected. The **Generate Masks** button is a rudimantary method of assisting the user in the creation of maskings. The algorithim takes the first sort as the base field, and generates masks for duplicative data associated with that field.

Note: Where the user creates many-to-many relationships with the data, such as a display of ULNs, Force Modules, Carrier IDs and Cargo Category Codes, masking may not achieve the desired affect.

3.4.3 Master

The MASTER function is an advanced AHQ tool available for users who need visibility of data with NULL fields. AHQ's underlying language is that of Standard Query Language or SQL. Both SQL and most modern relational database query languages improve their performance by eliminating data that has a NULL value. In other words, if nothing exists for the query, nothing is displayed. This offers potential problems for some users. Occasionally, the existence of NULL value for data has importance.

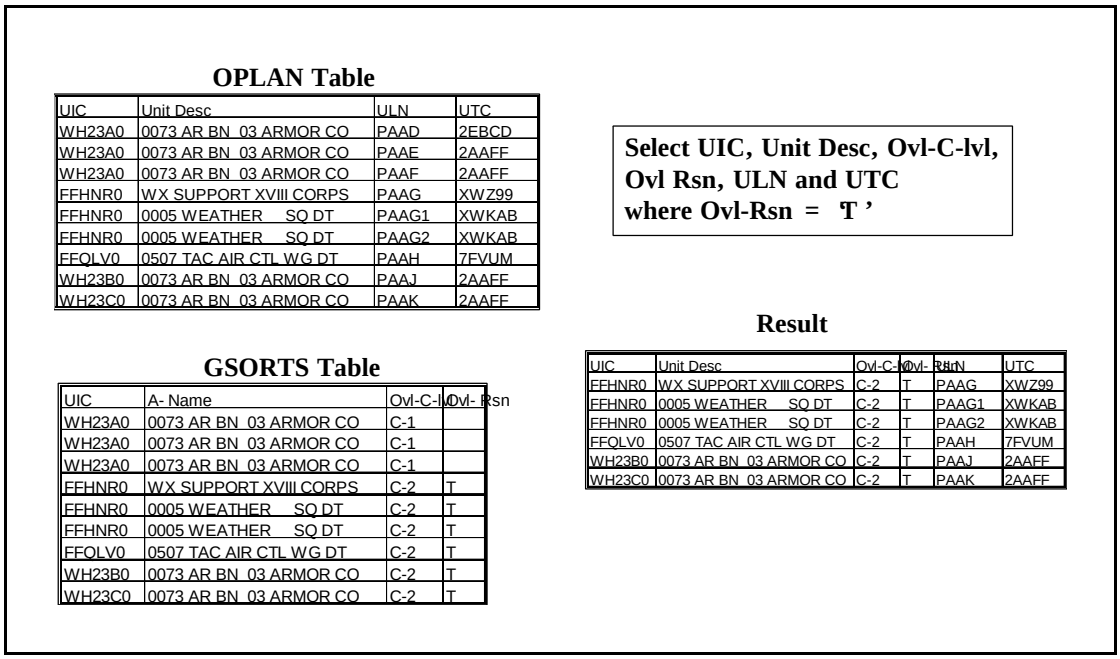
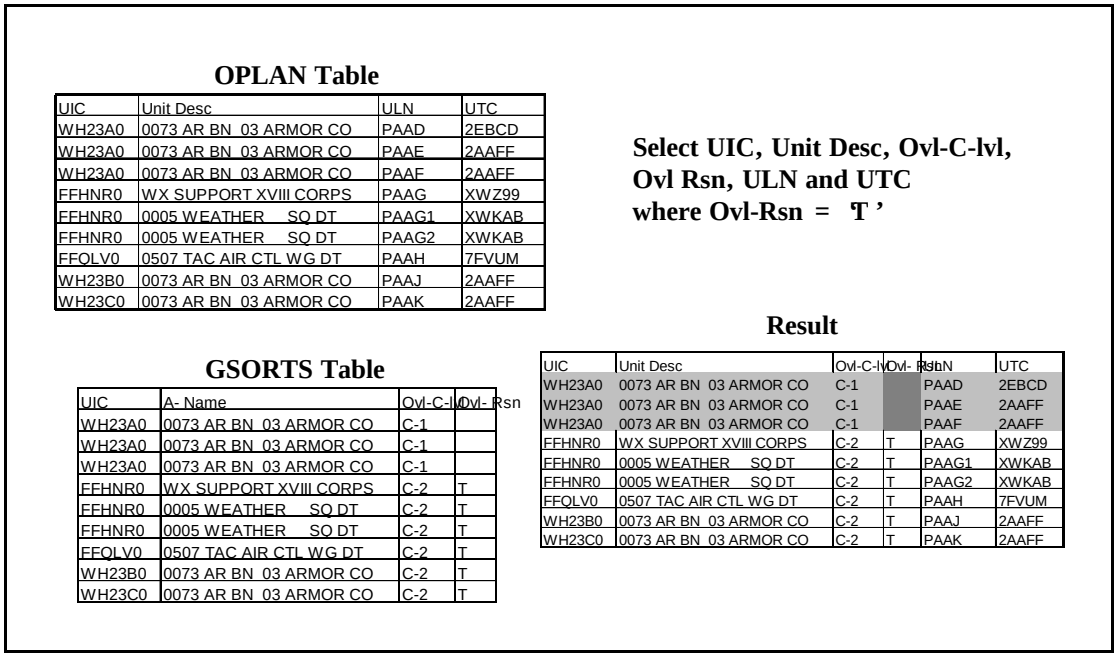


Figure 3-42: Sample Query Without Selecting MASTER Function.

The operator MISSING on the AHQ-002 screen performs a similar function as the MASTER when the user knows the field(s) where both information is desired and NULL conditions are likley to exist. Figures 3-42 and 3-43 provide an example of how MASTER works. With every feature, there is a cost however. The power of setting a MASTER is offset by the time it makes in retrieving all of the NULL information. Depending upon the complexity of the query (as well as the number of tables required to transit), the time required to display the results is considerably longer.

The user has default column selections associated with many of the displays. The selection of which column is MASTER depends both upon the type of data anticipated to be NULL and the type of data to be displayed. Typically, if requirements data is sought, a ULN would be a typical MASTER. If Scheduling data is sought, then Carrier ID is an appropriate MASTER.



OPLAN Table

UIC	Unit Desc	ULN	UTC
WH23A0	0073 AR BN 03 ARMOR CO	PAAD	2EBCD
WH23A0	0073 AR BN 03 ARMOR CO	PAAE	2AAFF
WH23A0	0073 AR BN 03 ARMOR CO	PAAF	2AAFF
FFHNR0	WX SUPPORT XVIII CORPS	PAAG	XWZ99
FFHNR0	0005 WEATHER SQ DT	PAAG1	XWKAB
FFHNR0	0005 WEATHER SQ DT	PAAG2	XWKAB
FFQLV0	0507 TAC AIR CTL WG DT	PAAH	7FVUM
WH23B0	0073 AR BN 03 ARMOR CO	PAAJ	2AAFF
WH23C0	0073 AR BN 03 ARMOR CO	PAAK	2AAFF

Select UIC, Unit Desc, Ovl-C-lvl, Ovl Rsn, ULN and UTC where Ovl-Rsn = 'T'

GSORTS Table

UIC	A- Name	Ovl-C-lvl	Ovl- Rsn
WH23A0	0073 AR BN 03 ARMOR CO	C-1	
WH23A0	0073 AR BN 03 ARMOR CO	C-1	
WH23A0	0073 AR BN 03 ARMOR CO	C-1	
FFHNR0	WX SUPPORT XVIII CORPS	C-2	T
FFHNR0	0005 WEATHER SQ DT	C-2	T
FFHNR0	0005 WEATHER SQ DT	C-2	T
FFQLV0	0507 TAC AIR CTL WG DT	C-2	T
WH23B0	0073 AR BN 03 ARMOR CO	C-2	T
WH23C0	0073 AR BN 03 ARMOR CO	C-2	T

Result

UIC	Unit Desc	Ovl-C-lvl	Ovl- Rsn	ULN	UTC
WH23A0	0073 AR BN 03 ARMOR CO	C-1		PAAD	2EBCD
WH23A0	0073 AR BN 03 ARMOR CO	C-1		PAAE	2AAFF
WH23A0	0073 AR BN 03 ARMOR CO	C-1		PAAF	2AAFF
FFHNR0	WX SUPPORT XVIII CORPS	C-2	T	PAAG	XWZ99
FFHNR0	0005 WEATHER SQ DT	C-2	T	PAAG1	XWKAB
FFHNR0	0005 WEATHER SQ DT	C-2	T	PAAG2	XWKAB
FFQLV0	0507 TAC AIR CTL WG DT	C-2	T	PAAH	7FVUM
WH23B0	0073 AR BN 03 ARMOR CO	C-2	T	PAAJ	2AAFF
WH23C0	0073 AR BN 03 ARMOR CO	C-2	T	PAAK	2AAFF

Figure 3-43: Sample Query, Selecting UIC as MASTER Function.

3.4.4 Stored Queries

The Stored Query options; save, save as, open, and delete saved query, are available in the lower left-hand corner of the: Qualify Query, Format, and Main Menu screens.

Save Query. To save a query (format, not data) for later use (i.e., a retrieval desired again in the future) select Store Query (lower left of screen). The option stores the query just built or modified. Saving the query to an existing title (overwriting the current one) or create a unique title is permitted. A stored query is saved under a name providing the Retrieved Stored Query option to retrieve it later.

Save Query As. This option provides a pop-up window that allows entry of the name, or a new name, to enable the retrieval of that query (file) for later use.

Open Saved Query. This option provides a pop-up window that requires a query (file) name to retrieve the query format for use. Select **OK** to pull the file, cancel to change, or Help if needed.

Delete Stored Query. This option, like the retrieve option, also provides a pop-up window. To delete a stored query, type in the query (file) name and select **OK**.

3.4.5 Do It

The "Do It" command executes the report (Figure 3-6). It initiates the retrieval and sends the data to the printer or screen as directed. The command line shortcut is Do It.

3.4.5.1 Do It Execution Summary.

To run a query:

1. Open a saved Query from the Main menu.

2. Identify whether the query should be run immediately or in background.

3. Navigate to the Report pull-down menu. Select **Do It.**

SECTION 4 - ERROR MESSAGES

4.1 AHQ APPLICATION ERROR MESSAGES

This section details some of the error messages that will be displayed as necessary to alert users about problems that exist in completing AHQ activities. The messages shown here list the specific message text and what actions the user should accomplish, if any. For ease of use, the messages are categorized by general topical area since many of the messages cross several functional lines.

4.2 MESSAGE/USER RESPONSE

4.2.1 General Error Messages

The following messages address a range of topics that apply to the system or environment or are applicable across several AHQ functions:

Table 4-1: General Error Messages.

MESSAGE	USER ACTION
ERROR FILE EXITS.	Notify your system administrator to review the error file.
AN ERROR OCCURRED DURING THE DUMP OF THE ERROR LOG. FILE NAME CANNOT CONTAIN	Notify your system administrator.
POSITIONED AT THE LAST PAGE. POSITIONED AT THE LAST PAGE OF WORK AREA. POSITIONED AT THE FIRST PAGE. POSITIONED AT THE FIRST PAGE OF WORK AREA. ALREADY AT THE LAST ENTRY ON THE LIST.	These messages will appear while a user is working in a scroll region such as the itinerary of a carrier. They will occur when the cursor or focus is at the extreme top or bottom of the list or rows of items and a user tries to move further on the list with function keys or arrow keys. Since there are no more items on the list in the direction of movement, you cannot move up or down the list any further. Use the TAB keys or mouse to move out of the scroll region.

MESSAGE	USER ACTION
YOU ENTERED AN INVALID ACTION CODE. YOU ENTERED AN INVALID COMMAND.	Re-enter the appropriate action code or command. Check the field help if available by pressing F1 on the field in which you are working.
CANNOT INSERT AT THIS POSITION. INSERT IS INVALID AT THIS LOCATION.	Insert is generally used to place a line of information in the middle of a list in the scroll region. Use the add function to place data elsewhere in the list.
YOU SPECIFIED AN INVALID ROW POSITION.	This will appear when you enter a row number at the top of the screen that is greater than the total rows in the list. Re-enter a valid number and press the TAB key.
YOU ENTERED AN INVALID VALUE.	Check you entry to determine why it is invalid. Use field level or screen help for assistance.
A SELECTION MUST BE MADE BEFORE PROCEEDING.	Check you entry to determine why it is invalid. Use field level or screen help for assistance.
UNABLE TO PRINT THE SCREEN.	Notify your system administrator.
FILE NAME IS TOO LONG.	Re-enter a valid file name.
THIS COMMAND DOES NOT REQUIRE ARGUMENTS.	The JOPES Information Trace (JSIT) or Rapid Navigation (RN) code you used does not require any accompanying criteria. Re-enter an appropriate JSIT or RN.
UNABLE TO EXECUTE THE SELECTED EVENT.	Notify your system administrator.

4.2.2 Permissions

The following errors will be generated if the user does not have functional permissions to perform the type of activity being done, if the user does not have permissions to the OPLAN(s) being used, if the OPLAN has not been distributed and made available to the user at that site, or if the OPLAN does not exist. Users should contact their Functional Database Manager (FDBM), Technical Database Manager (TDBM), or appropriate System Administrator (SA) for assistance or clarification if necessary.

Table 4-2: Permissions Error Messages.

MESSAGE	USER ACTION
THE OPLAN DOES NOT EXIST IN THE DATABASE. THE OPLAN IS ALREADY IN THE LIST. YOU ENTERED AN INVALID OPLAN. THE SELECTED OPLAN IS NOT AVAILABLE AT THIS TIME. THE OPLAN IS NOT AVAILABLE FOR ACTION. THE OPLAN IS NOT AVAILABLE.	These messages will appear whenever a user attempts to identify an OPLAN that is either not accessiable or not in the database. If the plan should be available for use, contact your FDBM or system administrator for assistance.
INVALID OPLAN PERMISSIONS PREVENT ACCESS TO THE SELECTED OPLAN(S). YOU DO NOT HAVE PERMISSIONS TO THE ENTERED OPLAN(S). YOU DO NOT HAVE PERMISSION TO EXECUTE THIS EVENT. USER HAS NO PERMISSIONS TO CREATE OR MODIFY NON-ORGANIC CARRIER. NO FUNCTIONAL PERMISSIONS OR ACCESS. PLEASE EXIT NOW.	These messages apply when a user lacks the necessary security or functional permissions to perform the functions being used. If you believe the message(s) are wrong, contact your SA or your functional database manager.

MESSAGE	USER ACTION
NO DEFAULT OPLAN IS AVAILABLE. YOU MUST ENTER ONE. YOU MUST ENTER AN OPLAN.	Enter, or re-enter a valid OPLAN. (On most OPLAN fields, you may use the F1 help key to search for OPLANs on the system.
OPLAN PERMISSIONS AND/OR AVAILABILITY PREVENT ANY DELETIONS.	You may not delete carriers without having permissions to the OPLANs that the carrier supports.

SECTION 5 - NOTES

5.1 TERMS AND ABBREVIATIONS

Refer to the JOPES Users Data Element Dictionary, TD 18-14-2, and the S&M/CS DED for a list of JOPES terms and abbreviations. Section 5 contains a list of acronyms used throughout this manual.

ACL . . . . . Allowable Cabin Load
ACT . . . . . Action Code
ADP . . . . . Automated Data Processing
AFB . . . . . Air Force Base
AHQ . . . . . Ad Hoc Query
ALD . . . . . Available to Load Date (at POE)
AMC . . . . . Air Mobility Command
AOR . . . . . Area of Responsibility
APERS . . . . . Authorized Personnel
APOD . . . . . Aerial Port of Debarkation
APOE . . . . . Aerial Port of Embarkation
APORTS . . . . . Aerial Ports and Air Operations Base File
ARPA . . . . . Advanced Research Projects Agency (formerly DARPA)
ARTEC . . . . . Air Route Distances
ARV . . . . . Arrive/Arrival
ASSETS . . . . . Transportation Assets File
AWIS . . . . . Army WWMCCS Information System

B&W . . . . . Black and White
BB . . . . . Breakbulk
BLD . . . . . Begin Load Date
BPI . . . . . Bits Per Inch
BULK . . . . . Bulk Cargo

C-DAY . . . . . Deployment Operation Commencement Day
C/S . . . . . Client Server
CARS . . . . . Combat Arms Regimental System
CAT . . . . . Crisis Action Team
CBBLS . . . . . Hundreds of Barrels
CC . . . . . Country Code
CCC . . . . . Cargo Category Code
CDRL . . . . . Contract Data Requirements List
CEI . . . . . Critical Employment Indicator
CHSTR . . . . . Characteristics of Transportation Assets
CI . . . . . Configuration Item
CIN . . . . . Cargo Increment Number
CINC . . . . . Commander in Chief
CLS SUB . . . . . Supply Class and Subclass

COA . . . . . Course of Action
COE . . . . . Common Operating Environment
CONOPS . . . . . Concept of Operations
CONUS . . . . . Continental United States
COTS . . . . . Commercial Off-the-Shelf
CRD . . . . . CINC Required Date
CSCI . . . . . Computer Software Configuration Item
CT . . . . . Country
CUI . . . . . Character-based User Interface

DARPA . . . . . Defense Advanced Research Projects Agency (now ARPA)
DART . . . . . Dynamic Analysis and Replanning Tool
DB . . . . . Database
DBMS . . . . . Database Management System
DC . . . . . Discharge Constraint
DEST . . . . . Destination
DID . . . . . Data Item Description
DOD . . . . . Department of Defense
DPT . . . . . Depart/Departure
DTG . . . . . Date Time Group

EAD . . . . . Earliest Arrival Date
EDD . . . . . Estimated Departure Date
EIC . . . . . Equipment Identification Code
ETC . . . . . Enhanced Terminal Capability

FAD . . . . . Feasible Arrival Date
FAST . . . . . Flow and Analysis System for USTRANSCOM
FDBM . . . . . Functional Database Manager
FIC . . . . . Force Indicator Code
FM . . . . . Force Module
FMID . . . . . Force Module Identification
FORTRAN . . . . . Formula Translation
FRAG . . . . . Fragmentation Code
FRG . . . . . Force Requirements Generator
FRN . . . . . Force Requirement Number
FTC . . . . . Fuel Type Code
FTP . . . . . File Transfer Process

GAC . . . . . Geographic Area Code
GCCS . . . . . Global Command and Control System
GDSS . . . . . Global Decision Support System
GEOCODE . . . . . Geographic Location Code
GEOFILE . . . . . Geographic File
GEOLOC . . . . . Geographic Locations File
GNT . . . . . Grant
GPH . . . . . Graphics

GSORTS . . . . . GCCS Status of Resources and Training System
GTN . . . . . Global Transportation Network
GUI . . . . . Graphical User Interface

ICAO . . . . . International Civil Aviation Organization
IDS . . . . . Integrated Data Store
ILOC . . . . . Intermediate Location
IMS . . . . . Information Management Subsystem
INST . . . . . Installation
IRM . . . . . Information Resource Manager
IRS . . . . . Interface Requirements Specification
ITC . . . . . Installation Type Code

JCS . . . . . Joint Chiefs of Staff
JDS . . . . . Joint Deployment System
JDSIP . . . . . Joint Deployment System Interface Processor
JDSUP . . . . . Joint Deployment System Update Processor
JES . . . . . JOPES Executive Subsystem
JFAST . . . . . Joint Flow and Analysis System for Transportation
JOPES . . . . . Joint Operation Planning and Executive System
JOPS . . . . . Joint Operation Planning System
JPEC . . . . . Joint Planning and Execution Community
JSIT . . . . . JOPES Information Trace

LAD . . . . . Latest Arrival Date
LGTH . . . . . Length
LOC . . . . . Lines of Communication
LOGSAFE . . . . . Logistics Sustainability Analysis and Execution System
LPR . . . . . Logistics Planning and Reporting
LRWC . . . . . Long Range Wide Body Cargo - Aircraft
LRWP . . . . . Long Range Wide Body Passenger - Aircraft
LTON . . . . . Long Ton

M-DAY . . . . . Mobilization Day
MAC . . . . . Military Airlift Command
MAJCOM . . . . . Major Command
MB . . . . . Megabyte
MBBL . . . . . 1000 Barrels
MEDCOM . . . . . Mediterranean Command (Fictional)
MHE . . . . . Materiel Handling Equipment
MILSTAMP . . . . . Military Standard Transportation and Movement Procedures
MMI . . . . . Man Machine Interface
MOBSTA . . . . . Mobilization Station
MODE . . . . . Mode of Transportation
MRG . . . . . Movements Requirement Generator
MSC . . . . . Military Sealift Command
MSLF . . . . . Minimum Ship Loading Fraction

MTMC . . . . . Military Traffic Management Command
MTON . . . . . Measurement Ton

N-DAY . . . . . Negative Day
NAT . . . . . Non Air-Transportable Cargo
NEO . . . . . Non-Combatant Evacuation Operations
NRC . . . . . Nonunit-Related Cargo
NRP . . . . . Nonunit-Related Personnel
NU . . . . . Nonunit

OPCON . . . . . Operation Control
OPLAN . . . . . Operation Plan
OPORD . . . . . Operation Order
ORG . . . . . Organic
ORGN . . . . . Organic
ORIG . . . . . Origin
OUT . . . . . Outsize Cargo
OVR . . . . . Oversize Cargo

PAX . . . . . Passengers
PC . . . . . Personal Computer
PCD . . . . . Projected Closure Date
PFE . . . . . Prototype Feasibility Estimator
PI . . . . . Plan Information
PIC . . . . . Parent Indicator Code
PID . . . . . Plan Identification Number
PIN . . . . . Personnel Increment Number
POC . . . . . Point of Contact
POD . . . . . Port of Debarkation
POE . . . . . Port of Embarkation
POL . . . . . Petroleum/Oil/Lubricants
POM . . . . . Prepare for Overseas Movement
POS . . . . . Ports of Support
PORTS . . . . . Ports Characteristics File
PROVORG . . . . . Providing Organization

RAM . . . . . Random Access Memory
RDBMS . . . . . Relational Database Management System
RDD . . . . . Required Delivery Date (at Destination)
REQ NBR . . . . . Requirement Number
REQ . . . . . Required
REQ . . . . . Requirement(s)
REQID . . . . . Requirement Identifier
RETRO . . . . . Retrograde
REV . . . . . Review
RFM . . . . . Reference File Manager
RLD . . . . . Ready to Load Date (at Origin)

RN . . . . . Rapid Navigation
RO/RO . . . . . Roll On/Roll Off
RQMNT . . . . . Requirement

S-BULK . . . . . Short Tons, Bulk Cargo
S-OUT . . . . . Short Tons, Outsize Cargo
S-OVER . . . . . Short Tons, Oversize Cargo
S&M/CS . . . . . Scheduling and Movement Client-Server
S&M . . . . . Scheduling and Movement
SA . . . . . System Administrator
SC . . . . . State Code
SEQNR . . . . . Sequence Number
SLD . . . . . Start Load Date
SORTS . . . . . Status of Resources and Training System
SPOD . . . . . Sea Port of Debarkation
SPOE . . . . . Sea Port of Embarkation
SPORTS . . . . . Sea Ports File
SPTD . . . . . Supported
SPTG . . . . . Supporting
SQFT . . . . . Square Feet
SQL . . . . . Structured Query Language
SRA . . . . . Systems Research and Applications Corporation
SRC . . . . . Standard Reference Code
SRF . . . . . Summary Reference File
SRS . . . . . Software Requirements Specification
SRTDF . . . . . Sealift Route Definition
SSDD . . . . . System/Subsystem Design Document
SSSRC . . . . . Sealift Shuttle Search
ST . . . . . State
STD . . . . . Software Test Description
STD . . . . . Standard
STON . . . . . Short Ton
STP . . . . . Software Test Plan
STRDX . . . . . Sealift Transfer Distances
STSRC . . . . . Sealift Transfer Search
SUM . . . . . Software User's Manual
SVC . . . . . Service Code

TCC . . . . . Transportation Component Command
TDBM . . . . . Technical Database Manager
TE . . . . . Transaction Editor
TEDREP . . . . . Type Unit Detail Report
TEMP . . . . . Test and Evaluation Master Plan
TFE . . . . . Transportation Feasibility Estimator
TIP . . . . . Technology Insertion Project
TLCSC . . . . . Top Level Computer Software Component
TPFDD . . . . . Time-Phased Force and Deployment Data

TPHOLD . . . . . TPFDD Hold File
TPSN . . . . . Troop Sequence Number
TPTRL . . . . . Time - Phased Transportation Requirements List
TSS . . . . . Time Sharing System
TUCHA . . . . . Type Unit Characteristics File
TUCHAREP . . . . . Type Unit Characteristics Report
TUDET . . . . . Type Unit Equipment Detail File

UDESC . . . . . Unit Description
UI . . . . . Unit Information
UIC . . . . . Unit Identification Code
ULC . . . . . Unit Level Code
ULN . . . . . Unit Line Number
UNO . . . . . Unit Number
USD . . . . . ULD Deployment Screen
USERID . . . . . User Identification
USTRANSCOM . . . . . United States Transportation Command
UTC . . . . . Unit Type Code
UTE . . . . . Utilization Rate

WAM . . . . . WWMCCS ADP Modernizaiton
WAN . . . . . Wide Area Network
WASSO . . . . . WWMCCS ADP Security Officer
WDT . . . . . Width
WIN . . . . . WWMCCS Intercomputer Network
WIS/CUS . . . . . WIS Common-User System
WIS . . . . . WWMCCS Information System
WT . . . . . Weight
WWMCCS . . . . . Worldwide Military Command and Control System